Access DB# 178116

SEARCH REQUEST FORM

Scientific and Technical Information Center

	8055 Number 30 7 (30)	Examiner # : Serial Number:	Date: 1/3/(C)
Mail Box and Bldg/Room Location	on: YAYT Re		circle): PAPER DISK E-MAIL
If more than one search is sub	mitted, please priorit	tize searches in order	of :need.
Please provide a detailed statement of th Include the elected species or structures, utility of the invention. Define any term known. Please attach a copy of the cover	keywords, synonyms, acre s that may have a special r	onyms, and registry numbers neaning. Give examples or i	and combine with the concept or
Title of Invention:			
Inventors (please provide full names):			
Earliest Priority Filing Date:			
For Sequence Searches Only Please incli	ude all pertinent information	parent, child, divisional, or is	ssued patent numbers) along with the
appropriate serial number.			
11 Sig to 100	100D1 Ca.	Eu d	
V Warever	gon con	Just of .	4
Whatever Electrol e So phese stee	the leas -	very lace	- tate polymer,
^			
So Allesse ster	of there	· The	160
) i		y vecco	
			•
		S	CIFNER
			CIENTIFIC REFERENCE BR
			Elan >
,			JAN 3 1 RECU
			Pat. & T.M. Office
			J. 108
	•		
STAFF USE ONLY	Toma of Carrel	************	*****
Searcher: XH	Type of Search NA Sequence (#)	STN \$ 1136.30	st where applicable
Searcher Phone #:	AA Sequence (#)	Dialog \$ 309	, 23
Searcher Location:	Structure (#)	Questel/Orbit	
Date Searcher Picked Up:	Bibliographic	Dr.Link	=======================================
Date Completed: 2/2/66	Litigation		 · · · · · · · · · · · · · · · · · ·
Searcher Prep & Review Time: 30	Fulltext	Sequence Systems	
Clerical Prep Time: 30	Patent Family	WWW/Internet	
Online Time: 446	Other	Other (specify)	



STIC Search Report

STIC Database Tracking Number: 178116

TO: John Hardee Location: REM 9A47

Art Unit : 1751 February 2, 2006

Case Serial Number: 10/718368

From: Les Henderson Location: EIC 1700 REM 4B28 / 4A30

Phone: 571-272-2538

Leslie.henderson@uspto.gov

Search Notes

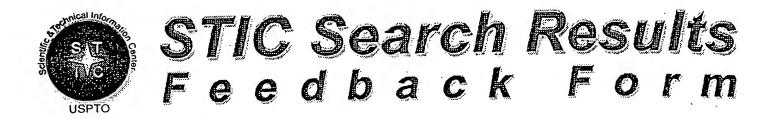
I apologize for the weird bolding in the Dialog part of the search. I am using the BETA version of STN 8.0 to access Dialog. Either there is a problem with using that version with Dialog, or there is another glitch. Yesterday, somehow the old version of STN (6.0) and the beta version both got corrupted and parts of the old STN had to be downloaded again.

In any case, the search terms used in Dialog are not necessarily highlighted, whereas whole blocks of text are bolded that shouldn't be. Also, I think that the program has inserted the word "SET" into some of the words of the answers. I believe set is actually part of the control terms for the highlighting, which should be in the background of the program and not visible in the text that can be seen or printed. (I think the command is SET-HI ON, & SET HI OFF).

30

ragle Dialog mostly pyments of towers.





EIC17000

Questions about the scope or the results of the search? Contact the EIC searcher or contact:

Kathleen Fuller, EIC 1700 Team Leader 571/272-2505 REMSEN 4B28

Vo	untary Results Feedback Form
AA	I am an examiner in Workgroup: Example: 1713 Relevant prior art found, search results used as follows:
	102 rejection
	☐ 103 rejection
	Cited as being of interest.
	Helped examiner better understand the invention.
	Helped examiner better understand the state of the art in their technology.
	Types of relevant prior art found:
	☐ Foreign Patent(s)
	Non-Patent Literature (journal articles, conference proceedings, new product announcements etc.)
>	· · · · · · · · · · · · · · · · · · ·
	Results verified the lack of relevant prior art (helped determine patentability).
	Results were not useful in determining patentability or understanding the invention.
C	omments:

Claims

Claim 1 (Original) A process for imparting an aestheticallypleasing substantive fragrance to, and/or substantially
removing a perceived malodour from one or more aqueous
surfactant-containing composition-treated solid or semi-solid
surfaces during treatment of said surfaces with one or more
surfactant-containing compositions comprising the steps of:

- i. providing a plurality of polymer particles (a) having a volume average diameter of from about 0.01 microns up to about 1000 microns; (b) having a solid or viscoelastic infrastructure which is composed of a substance selected from the group consisting of an ethylene-vinyl acetate copolymer containing from about 10% to about 90% vinyl acetate monomeric units, an ethylcellulose polymer, a polystyrene polymer and a polymethyl methacrylate polymer, said polymers having a number average molecular weight of from about 8000 to about 1 x 10⁶ and (c) having a substantially solid or viscoelastic three-dimensional porous infrastructure surrounding a free volume;
- ii. providing a surface treatment quantity of an aqueous composition comprising from about 1% to about 25% by weight of at least one surfactant which aqueous composition is designed to be in contact with said surfaces over a treatment period of time in a surface treatment concentration and temperature;
- iii. providing treatment means for enabling treatment of said surfaces;
 - iv. introducing (a) said aqueous composition; (b) said surfaces; and (c) said plurality of particles into said treatment means;

- v. engaging said treatment means for a treatment period of time at a treatment temperature;
- vi. disengaging said treatment means;
- vii. removing said surfaces from said treatment means; '
- viii. rinsing said surface; and
 - ix. drying said surface

wherein fragrance components of fragrance compositions and malodour molecules are compatible with said polymers.

Claim 2 (Original) The process of claim 1 wherein each of the free volumes of each of the polymer particles provided is initially empty and, during storage or treatment of said surfaces, absorbs components from said aqueous surfactant-containing composition and effects deposition of said fragrance components onto said surfaces.

Claim 3 (Original) The process of claim 1 wherein each of the free volumes of each of the polymer particles provided is initially empty, and during treatment, encapsulates malodourous components from said surfaces.

Claims 4-8 (Canceled).

Claim 9 (Original) The process of claim 1 for imparting an aesthetically-pleasing substantive fragrance to and/or substantially eliminating a perceived malodour from aqueous surfactant-containing composition-treated fabrics, hair follicles, mammalian epidermis or solid surfaces during treatment of said fabrics, hair follicles, mammalian epidermis

or solid surfaces with surfactant-containing compositions comprising the steps of:

- providing a plurality of polymer particles (a) having a volume average diameter of from about 0.01 microns to about 1000 microns, (b) having a solid or viscoelastic infrastructure which is composed of a substance selected from the group consisting of an ethylene-vinyl acetate copolymer containing from about 10% to about 90% vinyl acetate monomeric units, a polystyrene polymer, a polymethyl methacrylate polymer and an ethylcellulose polymer, each of said polymers having a number average molecular weight of from about 8000 to about 1 \times 10 6 and (c) having a substantially solid or viscoelastic threedimensional porous infrastructure having an internal free volume containing a liquid phase fragrance material removably entrapped in said infrastructure, contained in the interstices of said infrastructure and outwardly transportable from said infrastructure, each of the components of which fragrance material having a $C \log_{10} P$ in the range of from about 1 to about 7, the initial weight % of fragrance material contained in said plurality of polymer particles being from about 0.5% to about 50% by weight of the plurality of polymer particles, each of said fragrance components being compatible with said polymer;
- ii. providing a fabric, hair follicle, mammalian epidermis or solid surface treatment quantity of an aqueous composition comprising from about 1% to about 25% by weight of at least one surfactant which aqueous composition is designed to be in intimate treatment contact with, in the alternative, (a) at least one fabric article over a fabric treatment period of time in a fabric

treatment concentration and temperature; or (b) at least one solid surface over a solid surface treatment period of time in a solid surface treatment concentration and temperature; or (c) at least one hair follicle over a hair follicle treatment period of time in a hair follicle treatment concentration and temperature or (d) a mammalian epidermis surface over a mammalian epidermis surface treatment period of time in a mammalian epidermis surface treatment concentration and temperature;

- iii. providing treatment means for enabling treatment of said fabrics, said hair follicles, said mammalian epidermis or said solid surfaces;
 - iv. introducing (a) said aqueous composition; (b) said at least one fabric article, said at least one hair follicle, said at least one mammalian epidermis or said at least one solid surface; and (c) said plurality of polymer particles into said treatment means;
 - v. engaging said treatment means for a treatment period of time at a treatment temperature;
 - vi. disengaging said treatment means;
- vii. removing (a) said at least one fabric article or (b) said at least one solid surface or (c) said hair follicles or (d) said mammalian epidermis surface from said treatment means;
- viii. rinsing (a) said at least one fabric article or (b) said at least one solid surface or (c) said hair follicles or (d) said mammalian epidermis surface; and

ix. drying (a) said at least one fabric article or (b) said at least one solid surface or (c) said hair follicles or (d) said mammalian epidermis surface

wherein fragrance components and malodour molecules are compatible with said polymers.

Claim 10 (Original) The process of claim 9 wherein said treatment is a cleaning treatment.

Claim 11 (Original) The process of claim 10 wherein said polymer particle infrastructure is composed of an ethylenevinyl acetate copolymer.

Claim 12 (Original) The process of claim 9 wherein the treatment means is a laundry washing machine, and the process is for imparting an aesthetically-pleasing fragrance to and substantially removing a perceived malodour from aqueous surfactant-containing composition-treated fabrics.

Claim 13 (Original) The process of claim 12 wherein said polymer particle infrastructure is composed of an ethylene-vinyl acetate copolymer.

Claim 14 (Original) The process of claim 9 operated according to the mathematical model system:

$$m_{P}\int\limits_{0}^{\theta}\!\!\left(\frac{\partial C_{P}}{\partial\theta}\right)_{C_{S},C_{W}}\!\!d\theta + m_{W}\int\limits_{0}^{\theta}\!\!\left(\frac{\partial C_{W}}{\partial\theta}\right)_{C_{P},C_{S}}\!\!d\theta + m_{S}\int\limits_{0}^{\theta}\!\!\left(\frac{\partial C_{S}}{\partial\theta}\right)_{C_{P},C_{W}}\!\!d\theta = C_{T}m_{T} \text{ for the fragrance}$$

composition; and

$$\sum_{i=1}^{n} \left(m_{p} C_{pi} + m_{wi} C_{wi} + m_{r} C_{si} \right) = C_{T} m_{T} \quad \text{for "n" individual fragrance components wherein}$$

$1 \le i \le n$;

wherein θ represents time in hours;

wherein C_P represents the fragrance concentration in the polymer particle in grams/liter;

wherein $\frac{\partial C_p}{\partial \theta}$ represents the partial derivative of fragrance concentration in the polymer particle with respect to time, measures in grams/liter-hour;

wherein C_W represents the fragrance concentration in the water phase in grams/liter;

wherein $\frac{\partial C_{\rm w}}{\partial \theta}$ represents the partial derivative of fragrance concentration in the water phase with respect to time measured in grams/liter-hour;

wherein C_S represents the fragrance concentration in the surfactant phase in grams/liter;

wherein $\frac{\partial C_s}{\partial \theta}$ represents the partial derivative of fragrance concentration in the surfactant phase with respect to time measured in grams/liter-hour;

wherein C_T represents the total concentration of fragrance in the system in grams/liter;

wherein m_P represents the mass of the polymer particles in grams;

wherein $m_{\rm S}$ represents the surfactant mass in grams;

wherein m_W represents the water mass in grams; and wherein m_T represents the total system mass in gramswith all terms being measured at a point in time, $\theta\,.$

Claim 15 (Original) The process of claim 14 wherein in the mathematical model:

$$m_{P}\int\limits_{0}^{\theta}\!\!\left(\frac{\partial C_{P}}{\partial\theta}\right)_{C_{1},C_{\sigma}}d\theta+m_{W}\int\limits_{0}^{\theta}\!\!\left(\frac{\partial C_{W}}{\partial\theta}\right)_{C_{P},C_{3}}d\theta+m_{S}\int\limits_{0}^{\theta}\!\!\left(\frac{\partial C_{S}}{\partial\theta}\right)_{C_{P},C_{\sigma}}d\theta=C_{T}m_{T}$$

 $C_P = -k_1 LN(\theta+1) + k_2$ with $0.015 \ge k_1 \ge 0.03$ and $0.18 \ge k_2 \ge 0.22$;

 $C_S = k_3 LN(\theta + 1) + k_4$ with 1.5 x $10^{-3} \ge k_3 \ge 2.2$ x 10^{-3} and 1.2 x $10^{-4} \ge k_4 \ge 2.0$ x 10^{-4} ; and

 $C_W = k_5 LN(\theta + 1) + k_6$ with 1.5 x 10⁻⁶ \geq k_5 \geq 3.0 x 10⁻⁶ and 1.5 x 10⁻⁷ \geq k_6 \geq 3.0 x 10⁻⁷

Claim 16 (Original) The process of claim 9 wherein the plurality of polymer particles is produced by a process comprising the sequential steps of (a) blending polymer pellets with fragrance material for a period of time of from about 0.05 hours to about 20 hours; (b) extruding the resulting product at a temperature of from about 130°C to about 170°C to form an extrudate; (c) cooling the resulting extrudate to a temperature in the range of from about 15°C to about 40°C and (d) cryogrinding the resulting extrudate to form cryoground particles.

Claim 17 (Original) The process of claim 9 wherein the plurality of polymer particles is produced by a process comprising the sequential steps of (a) blending polymer pellets with silicon dioxide and fragrance material for a period of time of from about 0.05 hours to about 20 hours; (b) extruding the resulting product at a temperature of from about 130°C to about 170°C to form an extrudate; (c) cooling the resulting extrudate to a temperature in the range of from about 15°C to about 40°C and (d) cryogrinding the resulting extrudate to form cryoground particles.

Claim 18 (Original) The process of claim 9 wherein the plurality of polymer particles is produced by a process

comprising the sequential steps of (a) extruding polymer pellets with one or more foam forming agents to from a foamed extrudate; (b) cooling the resulting extrudate to form an extrudate tow; (c) particularizing the resulting tow to form microporous polymer particles; and (d) admixing the resulting particles with a fragrance composition, the components of which are compatible with the polymer.

Claims 19-49 (Canceled).

Claim 50 (Original) The process of claim 1 wherein at least a finite portion of the polymeric particles are polymethyl methacrylate polymer particles produced according to the process comprising the steps of:

- (a) milling polymethyl methacrylate to provide polymethyl methacrylate particles having an average effective diameter in the range of from about 5 microns to about 100 millimeters; and
- (b) admixing the resulting milled particles with a plasticizing quantity of a plasticizing compound selected from the group consisting of lower alkanols and lower alkanones or greater than about 10% aqueous solutions thereof for a time period of from about 30 seconds to about 10 minutes thereby forming plasticized polymer particles.

Claim 51 (Canceled).

G Claim 52 (Original) The process of claim 50 wherein in the process for producing the polymethyl methacrylate polymer particle composition, the resulting plasticized polymer



particles are separated from the plasticizing compound, and the thus-separated particles are then admixed with a fragrance material which is compatible with the polymethyl methacrylate, whereby from about 0.5% to about 50% by weight of the filled particle of fragrance is absorbed into each of the free volumes of each of the polymer particles.

Claims 53-55 (Canceled).

Claim 56 (Original) The process of claim 52 wherein in the process for producing the particles, the plasticizing composition is an aqueous solution of ethanol.

Claims 57-58 (Canceled).

Claim 59 (Original) The process of claim 52 wherein in the process for producing the particles, the plasticizing composition is a 50% aqueous solution of ethanol.

```
=> d his ful
```

```
(FILE 'HOME' ENTERED AT 13:00:11 ON 01 FEB 2006)
```

FILE 'STNGUIDE' ENTERED AT 13:00:15 ON 01 FEB 2006 SET LINE 250 SET DETAIL OFF

FILE 'HOME' ENTERED AT 13:00:20 ON 01 FEB 2006 SET LINE LOGIN SET DETAIL LOGIN

FILE 'HCAPLUS' ENTERED AT 13:03:25 ON 01 FEB 2006

FILE 'HCAPLUS' ENTERED AT 13:16:14 ON 01 FEB 2006

E US20050113267/PN

L1 1 SEA ABB=ON PLU=ON US20050113267/PN
D ALL
SEL RN

FILE 'REGISTRY' ENTERED AT 13:17:34 ON 01 FEB 2006

L2 4 SEA ABB=ON PLU=ON (24937-78-8/BI OR 9003-53-6/BI OR 9004-57-3/BI OR 9011-14-7/BI)

D SCAN

E 24937-78-8/CN

E 24937-78-8/RN 1 SEA ABB=ON PLU=ON 24937-78-8/RN

L3 1 SEA ABB=ON PLU=ON 24937-78-8/RN
D SCAN

L4 13973 SEA ABB=ON PLU=ON 108-05-4/CRN L5 13674 SEA ABB=ON PLU=ON 74-85-1/CRN

L6 2018 SEA ABB=ON PLU=ON L4 AND L5

E 9011-14-7/RN

L7 1 SEA ABB=ON PLU=ON 9011-14-7/RN D SCAN

D CN

E 80-62-6/CRN

L8 71568 SEA ABB=ON PLU=ON 80-62-6/CRN

E 9003-53-6/RN

L9 1 SEA ABB=ON PLU=ON 9003-53-6/RN

D SCAN

E 100-42-5/RN

L10 1 SEA ABB=ON PLU=ON 100-42-5/RN

D SCAN

L11

71910 SEA ABB=ON PLU=ON 100-42-5/CRN

D SCAN L10

E 9004-57-3/RN

L12 1 SEA ABB=ON PLU=ON 9004-57-3/RN

D SCAN

D CN

E 64-17-5/CRN

L13 7489 SEA ABB=ON PLU=ON 64-17-5/CRN

FILE 'REGISTRY' ENTERED AT 14:23:37 ON 01 FEB 2006

FILE 'HCAPLUS' ENTERED AT 14:24:33 ON 01 FEB 2006

L14 452330 SEA ABB=ON PLU=ON SURFACT? OR BIOSURFACT? OR
HYDROTROP? OR DETERG? OR ABSTERG? OR (SURFACE(W)ACTIVE#
OR WETTING# OR FOAMING#)(A)(AGENT? OR ADDITIVE? OR
COMPOUND? OR COMPD# OR CMPD#) OR EMULSIFIER? OR
DISPERSANT? OR SOAP? OR SHAMPOO?

L15 3523 SEA ABB=ON PLU=ON FABRIC(2A)SOFTEN?
L16 38073 SEA ABB=ON PLU=ON L3

L16 38073 SEA ABB=ON PLU=ON L3 L17 42394 SEA ABB=ON PLU=ON L6 L18 91090 SEA ABB=ON PLU=ON L4 L19 267816 SEA ABB=ON PLU=ON L5

L20 46462 SEA ABB=ON PLU=ON L18 AND L19

```
453929 SEA ABB=ON PLU=ON L14 OR L15
L21
           2521 SEA ABB=ON PLU=ON L21 AND L16
L22
L23
           2846 SEA ABB=ON PLU=ON L21 AND L17
           3258 SEA ABB=ON PLU=ON L21 AND L20
L24
                 QUE ABB=ON PLU=ON FRAGANC? OR PERFUM? OR PARFUM? OR
L25
                 COLOGNE? OR ODOR? OR AROMA? OR SMELL? OR SCENT? OR
                OLFACT? OR ESSENCE? OR BOUQUET?
           5463 SEA ABB=ON PLU=ON L25(2A) (PLEAS? OR AGREEABL? OR
L26
                NICE OR GOOD? OR BLISS? OR SWEET? OR DULCET?)
           6201 SEA ABB=ON PLU=ON MALODOR? OR MALODOUR? OR STINK? OR
L27
                STENCH?
L28
           5701 SEA ABB=ON PLU=ON L25(2A) (FOUL? OR BAD OR OFFEN? OR
                NASTY OR UNPLEAS?)
             43 SEA ABB=ON PLU=ON L26 AND L16
1.29
            48 SEA ABB=ON PLU=ON L26 AND L17
L30
L31
            51 SEA ABB=ON PLU=ON L26 AND L20
            51 SEA ABB=ON PLU=ON (L29 OR L30 O SEA ABB=ON PLU=ON L1 AND L32
                                     (L29 OR L30 OR L31)
1.32
L33
              1 SEA ABB=ON PLU=ON L1 AND L16
L34
             1 SEA ABB=ON PLU=ON L1 AND L17
1.35
              1 SEA ABB=ON PLU=ON L1 AND L20
L36
              1 SEA ABB=ON PLU=ON (L34 OR L35 OR L36)
L37
                D SCAN
          46462 SEA ABB=ON PLU=ON L16 OR L17 OR L20
L38
          3258 SEA ABB=ON PLU=ON L38 AND L21
L39
             1 SEA ABB=ON PLU=ON L1 AND L39
L40
            223 SEA ABB=ON PLU=ON L39 AND L25
L41
             0 SEA ABB=ON PLU=ON L1 AND L41
9 SEA ABB=ON PLU=ON L39 AND L27
3 SEA ABB=ON PLU=ON L39 AND L28
1.42
L43
L44
             12 SEA ABB=ON PLU=ON L43 OR L44
L45
              1 SEA ABB=ON PLU=ON L45 AND L1
1.46
                D SCAN L45
                D L45 TI ALL
                D SCAN TI
                D SCAN TI L45
                D QUE STAT L45
           3851 SEA ABB=ON PLU=ON (AIR OR FABRIC) (2A) FRESH?
2 SEA ABB=ON PLU=ON L14 AND L38 AND L47
L47
L48
                D SCAN
                D QUE
                E DETERGENT/CT
                E DETERGENTS/CT
                E FABRIC SOFTENER/CT
        1301314 SEA ABB=ON PLU=ON SOLID? OR SEMISOLID? OR SEMI(A) SOLI
1.49
                D?
T-50
          84341 SEA ABB=ON PLU=ON SURFAC? (2A) TREAT?
           3085 SEA ABB=ON PLU=ON L49(L)L50
L51
            338 SEA ABB=ON PLU=ON L51 AND L21
L52
              2 SEA ABB=ON PLU=ON L52 AND (L27 OR L28)
1 SEA ABB=ON PLU=ON L1 AND L53
L53
L54
                D SCAN L53
L55
                OUE ABB=ON PLU=ON PARTICL? OR MICROPARTICL? OR
                PARTICULAT? OR DUST? OR GRIT? OR GRAIN# OR GRANUL? OR
                POWDER? OR SOOT? OR SMUT? OR FINES# OR PRILL? OR
                FLAKE# OR PELLET? OR BB#
                D QUE L53
           1812 SEA ABB=ON PLU=ON L50 AND L55 AND L21
L56
                D QUE
L57
          11659 SEA ABB=ON PLU=ON L50(L)L55
           1245 SEA ABB=ON PLU=ON L57 AND L21
L58
                D OUE
L59
              1 SEA ABB=ON PLU=ON L58 AND L37
                D SCAN
L60
          75091 SEA ABB=ON PLU=ON L55(3A) (POLYM? OR HOMOPOLY? OR
                COPOLYM? OR (HOMO OR CO) (A) POLYM?)
```

```
9062 SEA ABB=ON PLU=ON L60 AND L21
L61
           40991 SEA ABB=ON PLU=ON L49(3A) (POLYM? OR HOMOPOLY? OR
L62
                 COPOLYM? OR (HOMO OR CO) (A) POLYM?)
           49706 SEA ABB=ON PLU=ON L61 OR L62
1643 SEA ABB=ON PLU=ON (V OR VOL OR VOLUM?)(2A)(AVE OR
L63
L64
                  AVERAG?) (2A) (DIA OR DIAM OR DIAMETER? OR DIAMETRE? OR
                 RADIUS OR RADII)
                 D OUE L61
                 D QUE L62
                 D QUE L61
L65
          50 SEA ABB=ON PLU=ON L64 AND L63
728605 SEA ABB=ON PLU=ON MICRON? OR MICROMET? OR MICRO(A) (ME
L66
                 TER? OR METRE?) OR M(A) (M OR METER? OR METRE?)
              32 SEA ABB=ON PLU=ON L65 AND L66
L67
L68
               1 SEA ABB=ON PLU=ON L67 AND L50
                 D SCAN
                 D QUE STAT
                 D QUE STAT L67
                 D SCAN
                 D L67 1-32 KWIC
                 D QUE L66
         672822 SEA ABB=ON PLU=ON MU#(A)(M OR METER? OR METRE?)
32 SEA ABB=ON PLU=ON L69 AND L65
0 SEA ABB=ON PLU=ON L1 AND L70
L69
L70
L71
                 D QUE L70
           10891 SEA ABB=ON PLU=ON FREE(A) (V OR VOL OR VOLUM?)
1.72
               0 SEA ABB=ON PLU=ON L72 AND L70
L73
               0 SEA ABB=ON PLU=ON L72 AND L67
1 SEA ABB=ON PLU=ON L72 AND L65
L74
L75
                 D SCAN
L76
             115 SEA ABB=ON PLU=ON L32 OR L45 OR L48 OR L53 OR L59 OR
                 L65 OR L67 OR L68 OR L70 OR L75
         113354 SEA ABBEON PLUEON DETERG?/SC,SX
10 SEA ABBEON PLUEON L77 AND L76
1 SEA ABBEON PLUEON L1 AND L78
1.77
L78
L79
             105 SEA ABB=ON PLU=ON L76 NOT L78
L80
L81
           36242 SEA ABB=ON PLU=ON VISCOELAS? OR VISCO(A) ELAST?
                 D 1-3 KWIC
L82
               1 SEA ABB=ON PLU=ON L80 AND L81
                 D SCAN
1.83
               2 SEA ABB=ON PLU=ON L76 AND L81
              11 SEA ABB=ON PLU=ON L78 OR L79 OR L83
L84
              39 SEA ABB=ON PLU=ON L80 AND SURFAC?
L85
                 E SURFACTANTS/CT
                 E E3+ALL
                 E SURFACTANT?/CT
L86
         118668 SEA ABB=ON PLU=ON SURFACTANT?/CT
L87
              10 SEA ABB=ON PLU=ON L86 AND L80
                 QUE ABB=ON PLU=ON INHIBIT? OR HINDER? OR IMPED? OR
L88
                 ARREST? OR REDUC? OR REDN# OR RESIST? OR SUPPRESS? OR
                 RETARD? OR PROHIBIT? OR PREVENT? OR BLOCK? OR ELIMINAT?
                  OR LESS? OR ABAT? OR DEPRESS? OR DIMINISH? OR
                 CURTAIL? OR ABSEN? OR REMOV?
L89
            3333 SEA ABB=ON PLU=ON L88(3A)(L27 OR L28)
L90
              61 SEA ABB=ON PLU=ON L89 AND L86 AND (L77 OR L21)
                 D OUE
              20 SEA ABB=ON PLU=ON L90 AND AQUEOUS?
L91
              40 SEA ABB=ON PLU=ON L91 OR L87 OR L84
L92
                D OUE L32
L93
               9 SEA ABB=ON PLU=ON L92 AND L38
              67 SEA ABB=ON PLU=ON L76 AND L38
L94
L95
              6 SEA ABB=ON
                              PLU=ON L94 AND L77
L96
              40 SEA ABB=ON
                             PLU=ON L92 OR L93 OR L95
              2 SEA ABB=ON PLU=ON L15 AND L76
L97
              40 SEA ABB=ON PLU=ON L96 OR L97
L98
                 D QUE L70
```

```
D QUE L65
T.99
           64132 SEA ABB=ON PLU=ON L7
L100
           143773 SEA ABB=ON PLU=ON L8
           23 SEA ABB=ON PLU=ON L76 AND (L99 OR L100)
1 SEA ABB=ON PLU=ON L90 AND (L99 OR L100)
58 SEA ABB=ON PLU=ON L98 OR L101 OR L102
108479 SEA ABB=ON PLU=ON L9
L101
L102
L103
L104
            61942 SEA ABB=ON PLU=ON L10
L105
           280201 SEA ABB=ON PLU=ON L11
L106
           416802 SEA ABB=ON PLU=ON (L104 OR L105 OR L106) OR ?STYRENE
L107
                 49 SEA ABB=ON PLU=ON L107 AND L76
6 SEA ABB=ON PLU=ON L108 AND L77
L108
L109
                 16 SEA ABB=ON PLU=ON L108 AND AQUEOUS?
L110
            10026 SEA ABB=ON PLU=ON L12
32484 SEA ABB=ON PLU=ON L13
L111
L112
                      OR L111 OR L112
                3 SEA ABB=ON PLU=ON L113 AND L76
11 SEA ABB=ON PLU=ON L113 AND L89
L114
L115
              2590 SEA ABB=ON PLU=ON L113 AND L21
L116
                     D QUE L38
                     D QUE
                4 SEA ABB=ON PLU=ON L116 AND L89
20 SEA ABB=ON PLU=ON L116 AND L81
L117
L118
                   D OUE
L119
              2602 SEA ABB=ON PLU=ON L113 AND (L21 OR L47)
               480 SEA ABB=ON PLU=ON L119 AND L77

1 SEA ABB=ON PLU=ON L120 AND L52

3 SEA ABB=ON PLU=ON L113 AND L52

13 SEA ABB=ON PLU=ON L113 AND L51
L120
L121
L122
L123
                85 SEA ABB=ON PLU=ON L103 OR L109 OR L110 OR L114 OR
L124
                    L115 OR L117 OR (L121 OR L122 OR L123)
               21 SEA ABB=ON PLU=ON L124 AND L77
64 SEA ABB=ON PLU=ON L124 AND (L21 OR L52 OR L65)
64 SEA ABB=ON PLU=ON L125 OR L126
L125
L126
1.127
               59 SEA ABB=ON PLU=ON L127 AND (L21 OR L47)
L128
               10 SEA ABB=ON PLU=ON L128 AND L38
L129
                  D 1-10 KWIC
                49 SEA ABB=ON PLU=ON L128 NOT L129
16 SEA ABB=ON PLU=ON L130 AND (L99 OR L100)
L130
L131
               22 SEA ABB=ON PLU=ON L130 AND L107
L132
                4 SEA ABB=ON PLU=ON L130 AND L113
L133
               39 SEA ABB=ON PLU=ON L129 OR L131 OR L132 OR L133
29 SEA ABB=ON PLU=ON L134 NOT L129
20 SEA ABB=ON PLU=ON L128 NOT L134
L134
L135
L136
=> => d que stat 1129
                  1 SEA FILE=HCAPLUS ABB=ON PLU=ON US20050113267/PN
L1
            1 SEA FILE=REGISTRY ABB=ON PLU=ON 24937-78-8/RN
13973 SEA FILE=REGISTRY ABB=ON PLU=ON 108-05-4/CRN
13674 SEA FILE=REGISTRY ABB=ON PLU=ON 74-85-1/CRN
L3
L4
L5
             2018 SEA FILE=REGISTRY ABB=ON PLU=ON L4 AND L5
L6
                  1 SEA FILE=REGISTRY ABB=ON PLU=ON 9011-14-7/RN
L7
            71568 SEA FILE=REGISTRY ABB=ON PLU=ON 80-62-6/CRN
1 SEA FILE=REGISTRY ABB=ON PLU=ON 9003-53-6/RN
1 SEA FILE=REGISTRY ABB=ON PLU=ON 100-42-5/RN
L8
L9
L10
             71910 SEA FILE=REGISTRY ABB=ON PLU=ON 100-42-5/CRN
L11
L12
                 1 SEA FILE=REGISTRY ABB=ON PLU=ON 9004-57-3/RN
L13
              7489 SEA FILE=REGISTRY ABB=ON PLU=ON 64-17-5/CRN
            452330 SEA FILE=HCAPLUS ABB=ON PLU=ON SURFACT? OR BIOSURFACT
L14
                     ? OR HYDROTROP? OR DETERG? OR ABSTERG? OR (SURFACE(W) AC
                     TIVE# OR WETTING# OR FOAMING#) (A) (AGENT? OR ADDITIVE?
                     OR COMPOUND? OR COMPD# OR CMPD#) OR EMULSIFIER? OR
                     DISPERSANT? OR SOAP? OR SHAMPOO?
              3523 SEA FILE=HCAPLUS ABB=ON PLU=ON FABRIC(2A)SOFTEN?
L15
```

```
38073 SEA FILE=HCAPLUS ABB=ON PLU=ON L3
L16
           42394 SEA FILE=HCAPLUS ABB=ON PLU=ON L6
L17
L18
           91090 SEA FILE=HCAPLUS ABB=ON PLU=ON L4
          267816 SEA FILE=HCAPLUS ABB=ON PLU=ON L5
L19
          46462 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND L19
453929 SEA FILE=HCAPLUS ABB=ON PLU=ON L14 OR L15
L20
L21
                  QUE ABB=ON PLU=ON FRAGANC? OR PERFUM? OR PARFUM? OR
L25
                  COLOGNE? OR ODOR? OR AROMA? OR SMELL? OR SCENT? OR OLFA
                  CT? OR ESSENCE? OR BOUQUET?
            5463 SEA FILE=HCAPLUS ABB=ON PLU=ON L25(2A) (PLEAS? OR
L26
                  AGREEABL? OR NICE OR GOOD? OR BLISS? OR SWEET? OR
                  DULCET?)
            6201 SEA FILE=HCAPLUS ABB=ON PLU=ON MALODOR? OR MALODOUR?
L27
                  OR STINK? OR STENCH?
            5701 SEA FILE=HCAPLUS ABB=ON PLU=ON L25(2A) (FOUL? OR BAD
1.28
                  OR OFFEN? OR NASTY OR UNPLEAS?)
              43 SEA FILE=HCAPLUS ABB=ON PLU=ON L26 AND L16 48 SEA FILE=HCAPLUS ABB=ON PLU=ON L26 AND L17
L29
L30
              51 SEA FILE=HCAPLUS ABB=ON PLU=ON L26 AND L20
L31
              51 SEA FILE=HCAPLUS ABB=ON PLU=ON (L29 OR L30 OR L31)
L32
              1 SEA FILE=HCAPLUS ABB=ON PLU=ON L1 AND L16
L34
               1 SEA FILE=HCAPLUS ABB=ON PLU=ON L1 AND L17
L35
               1 SEA FILE=HCAPLUS ABB=ON PLU=ON L1 AND L20
1 SEA FILE=HCAPLUS ABB=ON PLU=ON (L34 OR L35 OR L36)
L36
L37
           46462 SEA FILE=HCAPLUS ABB=ON PLU=ON L16 OR L17 OR L20
1.38
            3258 SEA FILE=HCAPLUS ABB=ON PLU=ON L38 AND L21
L39
                9 SEA FILE=HCAPLUS ABB=ON PLU=ON L39 AND L27
L43
              3 SEA FILE=HCAPLUS ABB=ON PLU=ON L39 AND L28 12 SEA FILE=HCAPLUS ABB=ON PLU=ON L43 OR L44
L44
L45
            3851 SEA FILE=HCAPLUS ABB=ON PLU=ON (AIR OR FABRIC) (2A) FRE
1.47
                  SH?
                2 SEA FILE=HCAPLUS ABB=ON PLU=ON L14 AND L38 AND L47
L48
         1301314 SEA FILE=HCAPLUS ABB=ON PLU=ON SOLID? OR SEMISOLID?
L49
                  OR SEMI (A) SOLID?
           84341 SEA FILE=HCAPLUS ABB=ON PLU=ON SURFAC? (2A) TREAT?
L50
            3085 SEA FILE=HCAPLUS ABB=ON PLU=ON L49(L)L50
L51
L52
             338 SEA FILE=HCAPLUS ABB=ON PLU=ON L51 AND L21
                2 SEA FILE=HCAPLUS ABB=ON PLU=ON L52 AND (L27 OR L28)
L53
L55
                  OUE ABB=ON PLU=ON PARTICL? OR MICROPARTICL? OR PARTI
                  CULAT? OR DUST? OR GRIT? OR GRAIN# OR GRANUL? OR POWDER
                  ? OR SOOT? OR SMUT? OR FINES# OR PRILL? OR FLAKE# OR PE
                  LLET? OR BB#
           11659 SEA FILE=HCAPLUS ABB=ON PLU=ON L50(L)L55
1245 SEA FILE=HCAPLUS ABB=ON PLU=ON L57 AND L21
1 SEA FILE=HCAPLUS ABB=ON PLU=ON L58 AND L37
L57
L58
L59
           75091 SEA FILE=HCAPLUS ABB=ON PLU=ON L55(3A) (POLYM? OR
L60
                  HOMOPOLY? OR COPOLYM? OR (HOMO OR CO) (A) POLYM?)
L61
            9062 SEA FILE=HCAPLUS ABB=ON PLU=ON L60 AND L21
           40991 SEA FILE=HCAPLUS ABB=ON PLU=ON L49(3A) (POLYM? OR
L62
                  HOMOPOLY? OR COPOLYM? OR (HOMO OR CO) (A) POLYM?)
           49706 SEA FILE=HCAPLUS ABB=ON PLU=ON L61 OR L62
1643 SEA FILE=HCAPLUS ABB=ON PLU=ON (V OR VOL OR VOLUM?)(2
L63
L64
                  A) (AVE OR AVERAG?) (2A) (DIA OR DIAM OR DIAMETER? OR
                  DIAMETRE? OR RADIUS OR RADII)
          50 SEA FILE=HCAPLUS ABB=ON PLU=ON L64 AND L63
728605 SEA FILE=HCAPLUS ABB=ON PLU=ON MICRON? OR MICROMET?
L65
L66
                  OR MICRO(A) (METER? OR METRE?) OR M(A) (M OR METER?
                  OR METRE?)
1.67
              32 SEA FILE=HCAPLUS ABB=ON PLU=ON L65 AND L66
L68
               1 SEA FILE=HCAPLUS ABB=ON PLU=ON L67 AND L50
          672822 SEA FILE=HCAPLUS ABB=ON PLU=ON MU#(A) (M OR METER? OR
L69
L70
              32 SEA FILE=HCAPLUS ABB=ON PLU=ON L69 AND L65
           10891 SEA FILE=HCAPLUS ABB=ON PLU=ON FREE(A)(V OR VOL OR
L72
L75
               1 SEA FILE=HCAPLUS ABB=ON PLU=ON L72 AND L65
```

```
115 SEA FILE=HCAPLUS ABB=ON PLU=ON L32 OR L45 OR L48 OR
L76
                   L53 OR L59 OR L65 OR L67 OR L68 OR L70 OR L75
           113354 SEA FILE=HCAPLUS ABB=ON PLU=ON DETERG?/SC,SX
               10 SEA FILE=HCAPLUS ABB=ON PLU=ON L77 AND L76
L78
           1 SEA FILE=HCAPLUS ABB=ON PLU=ON L1 AND L78
105 SEA FILE=HCAPLUS ABB=ON PLU=ON L76 NOT L78
36242 SEA FILE=HCAPLUS ABB=ON PLU=ON VISCOELAS? OR
1.79
1.80
L81
                   VISCO(A) ELAST?
L83
                 2 SEA FILE=HCAPLUS ABB=ON PLU=ON L76 AND L81
               11 SEA FILE=HCAPLUS ABB=ON PLU=ON L78 OR L79 OR L83
L84
L86
          118668 SEA FILE=HCAPLUS ABB=ON PLU=ON SURFACTANT?/CT 10 SEA FILE=HCAPLUS ABB=ON PLU=ON L86 AND L80
1.87
                   QUE ABB=ON PLU=ON INHIBIT? OR HINDER? OR IMPED? OR A
L88
                   RREST? OR REDUC? OR REDN# OR RESIST? OR SUPPRESS? OR RE
                   TARD? OR PROHIBIT? OR PREVENT? OR BLOCK? OR ELIMINAT? O
                   R LESS? OR ABAT? OR DEPRESS? OR DIMINISH? OR CURTAIL? O
                   R ABSEN? OR REMOV?
             3333 SEA FILE=HCAPLUS ABB=ON PLU=ON L88(3A)(L27 OR L28)
61 SEA FILE=HCAPLUS ABB=ON PLU=ON L89 AND L86 AND (L77
L89
L90
                   OR L21)
L91
               20 SEA FILE=HCAPLUS ABB=ON PLU=ON L90 AND AQUEOUS?
               40 SEA FILE=HCAPLUS ABB=ON PLU=ON L91 OR L87 OR L84
9 SEA FILE=HCAPLUS ABB=ON PLU=ON L92 AND L38
67 SEA FILE=HCAPLUS ABB=ON PLU=ON L76 AND L38
L92
L93
L94
                6 SEA FILE=HCAPLUS ABB=ON PLU=ON L94 AND L77
1,95
              40 SEA FILE=HCAPLUS ABB=ON PLU=ON L92 OR L93 OR L95
1,96
               2 SEA FILE=HCAPLUS ABB=ON PLU=ON L15 AND L76
1.97
          40 SEA FILE=HCAPLUS ABB=ON PLU=ON L96 OR L97 64132 SEA FILE=HCAPLUS ABB=ON PLU=ON L7 143773 SEA FILE=HCAPLUS ABB=ON PLU=ON L8
L98
L99
L100
L101
              23 SEA FILE=HCAPLUS ABB=ON PLU=ON L76 AND (L99 OR L100)
L102
                1 SEA FILE=HCAPLUS ABB=ON PLU=ON L90 AND (L99 OR L100)
               58 SEA FILE=HCAPLUS ABB=ON PLU=ON L98 OR L101 OR L102
L103
          108479 SEA FILE=HCAPLUS ABB=ON PLU=ON L9
L104
L105
           61942 SEA FILE=HCAPLUS ABB=ON PLU=ON L10
          280201 SEA FILE=HCAPLUS ABB=ON PLU=ON L11
L106
L107
          416802 SEA FILE=HCAPLUS ABB=ON PLU=ON (L104 OR L105 OR
                   L106) OR ?STYRENE
L108
               49 SEA FILE=HCAPLUS ABB=ON PLU=ON L107 AND L76
                6 SEA FILE=HCAPLUS ABB=ON PLU=ON L108 AND L77
1.109
L110
               16 SEA FILE=HCAPLUS ABB=ON PLU=ON L108 AND AQUEOUS?
           10026 SEA FILE=HCAPLUS ABB=ON PLU=ON L12
32484 SEA FILE=HCAPLUS ABB=ON PLU=ON L13
L111
L112
           36584 SEA FILE=HCAPLUS ABB=ON PLU=ON ETHYL(A) CELLULOSE OR
L113
                  ETHYLCELLULOSE OR L111 OR L112
L114
                3 SEA FILE=HCAPLUS ABB=ON PLU=ON L113 AND L76
               11 SEA FILE=HCAPLUS ABB=ON PLU=ON L113 AND L89
L115
          2590 SEA FILE=HCAPLUS ABB=ON PLU=ON L113 AND L21
4 SEA FILE=HCAPLUS ABB=ON PLU=ON L116 AND L89
2602 SEA FILE=HCAPLUS ABB=ON PLU=ON L113 AND (L21 OR L47)
L116
L117
L119
L120
             480 SEA FILE=HCAPLUS ABB=ON PLU=ON L119 AND L77
                1 SEA FILE=HCAPLUS ABB=ON PLU=ON L120 AND L52
L121
              3 SEA FILE=HCAPLUS ABB=ON PLU=ON L113 AND L52
13 SEA FILE=HCAPLUS ABB=ON PLU=ON L113 AND L51
85 SEA FILE=HCAPLUS ABB=ON PLU=ON L103 OR L109 OR L110
L122
L123
L124
                  OR L114 OR L115 OR L117 OR (L121 OR L122 OR L123)
L125
               21 SEA FILE=HCAPLUS ABB=ON PLU=ON L124 AND L77
L126
               64 SEA FILE=HCAPLUS ABB=ON PLU=ON L124 AND (L21 OR L52
                   OR L65)
L127
               64 SEA FILE=HCAPLUS ABB=ON PLU=ON L125 OR L126
              59 SEA FILE=HCAPLUS ABB=ON PLU=ON L127 AND (L21 OR L47)
L128
L129
              10 SEA FILE=HCAPLUS ABB=ON PLU=ON L128 AND L38
```

=> d 1129 1-10 ibib abs hitstr hitind

```
L129 ANSWER 1 OF 10 HCAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2005:1292027 HCAPLUS
```

DOCUMENT NUMBER: 144:8420

TITLE: Packaging containers for detergent

INVENTOR(S): Hardy, Gillian Margaret; Haward, Mark Timothy;

Mariani, Manuel

PATENT ASSIGNEE(S): The Procter & Gamble Company, USA

SOURCE:

U.S. Pat. Appl. Publ., 7 pp. CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

US 2005272624 A1 20051208 US 2005-147010	005 607
US 2005272624 A1 20051208 US 2005-147010	
	C 0 7
	607
EP 1605037 A1 20051214 EP 2004-253406	004
	608
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,	
MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ,	
EE, HU, PL, SK, HR	
WO 2005123895 A1 20051229 WO 2005-US19994	
	005
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ,	607
CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG,	
ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,	
KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,	
MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG,	
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ,	
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,	ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,	
ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH,	
CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT,	
LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF,	
CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG PRIORITY APPLN. INFO.: EP 2004-253406 A	
	004
	608

- AB A detergent pack comprises a combination of a malodor-generating water-soluble cleaning pouch, comprising a liquid composition and an enveloping film material, and a packaging container therefor wherein: (a) the liquid composition comprises a first perfume; and (b) the packaging container comprises a hot melt adhesive adhered to an internal wall thereof, the hot melt comprising an aldehyde-comprising perfume. There is also provided a method of preventing or reducing malodor in the interior of a packaging container containing a malodor -generating water-soluble pouch.
- IT 24937-78-8, Elvax 250

RL: TEM (Technical or engineered material use); USES (Uses)
 (packaging containers for detergent)

- RN 24937-78-8 HCAPLUS
- CN Acetic acid ethenyl ester, polymer with ethene (9CI) (CA INDEX NAME)

```
CM 1
```

CRN 108-05-4 CMF C4 H6 O2

ACO-CH-CH2

CM 2

CRN 74-85-1 CMF C2 H4

 $H_2C = CH_2$

IC ICM C11D017-00

INCL 510296000

CC 46-4 (Surface Active Agents and Detergents)

ST packaging container detergent

IT Alcohols, uses

RL: TEM (Technical or engineered material use); USES (Uses) (C12-15, ethoxylated propoxylated; packaging containers for detergent)

IT Perfumes

(aldehyde-based; packaging containers for detergent)

IT Adhesives

(hot-melt; packaging containers for detergent)

IT Packaging materials

Perfumes

(packaging containers for detergent)

IT Detergents

(packs; packaging containers for detergent)

IT 9002-89-5, Polyvinyl alcohol

RL: TEM (Technical or engineered material use); USES (Uses) (enveloping film; packaging containers for detergent)

IT 497-19-8, Sodium carbonate, uses 1344-09-8, Sodium Silicate 2809-21-4, Ethane 1-hydroxy-1,1-diphosphonic acid 3332-27-2, Tetradecyl dimethyl amine oxide 7758-29-4, Sodium tripolyphosphate 9000-90-2, Termamyl 15630-89-4, Sodium percarbonate 24937-78-8, Elvax 250 25265-71-8, Dipropylene glycol 851771-51-2, Foralyn 5020F RL: TEM (Technical or engineered material use); USES (Uses) (packaging containers for detergent)

L129 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2005:447085 HCAPLUS

DOCUMENT NUMBER:

142:483887

TITLE:

Polymer particulate

fragrance deposition on surfaces and

malodour elimination from

surfaces

INVENTOR(S):

Popplewell, Michael; Zhen, Yueqian; Bryant, Cory Michael; Pluyter, Johan Gerwin Lodewijk

PATENT ASSIGNEE(S):

International Flavors & Fragrances Inc., USA

SOURCE:

Eur. Pat. Appl., 43 pp.

CODEN: EPXXDW

DOCUMENT TYPE: LANGUAGE: Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.

KIND DATE

APPLICATION NO.

DATE

```
-----
                                            ______
    EP 1533365
                                20050525
                        A1
                                           EP 2004-257170
                                                                   2004
                                                                   1119
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
            MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ,
             EE, HU, PL, SK, HR, IS, YU
     US 2005113267
                         A1
                                20050526
                                           US 2003-718368
                                                                   2003
                                                                   1120
                                           US 2003-718368
PRIORITY APPLN. INFO.:
                                                                   2003
                                                                   1120
    A process for imparting an aesthetically-pleasing substantive
AΒ
     fragrance to, and/or substantially removing a perceived
    malodour from one or more aqueous surfactant
     -containing composition treated solid or semi
     -solid surfaces during treatment of
     said surfaces with one or more surfactant
     -containing compns., comprises the steps of: i. providing a plurality
    of polymer particles (a) having a vol
     . average diameter of from about 0.01 \mu up to
     about 1000 \mu; (b) having a solid or
    viscoelastic infrastructure which is composed of a
     substance selected from the group consisting of an ethylene-vinyl
     acetate copolymer containing from about 10% to about 90% vinyl acetate
    monomeric units, an ethylcellulose polymer, a
    polystyrene polymer and a polymethyl methacrylate polymer,
     said polymers having a number average mol. weight of from about 8000 to
    about 1 x 106 and (c) having a substantially solid or
    viscoelastic three-dimensional porous infrastructure
     surrounding a free volume; ii. providing a
    surface treatment quantity of an aqueous
    composition comprising from about 1% to about 25% by weight of at least
    one surfactant which aqueous composition is designed to
    be in contact with said surfaces over a
     treatment period of time in a surface
     treatment concentration and temperature The process further includes
    the steps of: iii. providing treatment means for enabling
     treatment of said surfaces; iv. introducing (a)
     said aqueous composition; (b) said surfaces; and (c) said
    plurality of particles into said treatment means; v.
    engaging said treatment means for a treatment period of time at a
    treatment temperature; vi. disengaging said treatment means; vii.
     removing said surfaces from said treatment
    means; viii. rinsing said surface; and ix. drying said surface
    wherein fragrance components of fragrance compns. and
    malodour mols. are compatible with said polymers.
    9011-14-7, Polymethyl methacrylate
TТ
    RL: TEM (Technical or engineered material use); USES (Uses)
        (ELVACITE 2041; polymer particulate
        fragrance deposition on surfaces and malodour
        elimination from surfaces)
RN
    9011-14-7 HCAPLUS
    2-Propenoic acid, 2-methyl-, methyl ester, homopolymer (9CI) (CA
CN
    INDEX NAME)
    CM
         1
    CRN 80-62-6
```

CMF C5 H8 O2

```
H<sub>2</sub>C O
Me-C-C-OMe
     9003-53-6, Polystyrene 9004-57-3,
     Ethylcellulose 24937-78-8, Ethylene-vinyl
     acetate copolymer
     RL: TEM (Technical or engineered material use); USES (Uses)
        (polymer particulate fragrance deposition
        on surfaces and malodour elimination from
        surfaces)
     9003-53-6 HCAPLUS
RN
CN
     Benzene, ethenyl-, homopolymer (9CI) (CA INDEX NAME)
     CM
     CRN 100-42-5
     CMF C8 H8
H_2C = CH - Ph
RN
     9004-57-3 HCAPLUS
     Cellulose, ethyl ether (8CI, 9CI) (CA INDEX NAME)
CN
     CM
     CRN 9004-34-6
     CMF Unspecified
     CCI PMS, MAN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
          2
     CM
     CRN 64-17-5
     CMF C2 H6 O
\rm H_3C-CH_2-OH
     24937-78-8 HCAPLUS
RN
CN
     Acetic acid ethenyl ester, polymer with ethene (9CI) (CA INDEX
     NAME)
     CM
          1
     CRN 108-05-4
     CMF C4 H6 O2
Aco-CH=CH2
     CM
          2
     CRN 74-85-1
     CMF C2 H4
```

 $H_2C = CH_2$

Les Henderson Page 10 571-272-2538

```
ICM C11D003-50
IC
     ICS C11D003-37; C11D003-22; C11D017-00; A61K007-46
CC
     46-5 (Surface Active Agents and Detergents)
     Section cross-reference(s): 62
     porous polymer particle fragrance carrier;
ST
     ethylene vinyl acetate copolymer porous particle
     fabric softener
    Detergents
IΤ
        (laundry, granular; polymer
        particulate fragrance deposition on surfaces and
        malodour elimination from surfaces)
ΙT
     Fabric softeners
       Shampoos
        (polymer particulate fragrance deposition
        on surfaces and malodour elimination from
        surfaces)
     9011-14-7, Polymethyl methacrylate
IT
     RL: TEM (Technical or engineered material use); USES (Uses)
        (ELVACITE 2041; polymer particulate
        fragrance deposition on surfaces and malodour
        elimination from surfaces)
     9003-53-6, Polystyrene 9004-57-3,
TТ
     Ethylcellulose 24937-78-8, Ethylene-vinyl
     acetate copolymer
     RL: TEM (Technical or engineered material use); USES (Uses)
        (polymer particulate fragrance deposition
        on surfaces and malodour elimination from
        surfaces)
                              THERE ARE 6 CITED REFERENCES AVAILABLE
REFERENCE COUNT:
                        6
                              FOR THIS RECORD. ALL CITATIONS AVAILABLE
                              IN THE RE FORMAT
L129 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:328856 HCAPLUS
                        140:341165
DOCUMENT NUMBER:
TITLE:
                       Odorant-containing solid cleaning agent
INVENTOR(S):
                       Wrede, Wolfgang
PATENT ASSIGNEE(S):
                      Symrise G.m.b.H. & Co. K.-G., Germany
SOURCE:
                        Ger. Offen., 5 pp.
                        CODEN: GWXXBX
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
                                         APPLICATION NO.
    PATENT NO.
                       KIND DATE
                                                                  DATE
     ------
    DE 10247289
                               20040422
                                           DE 2002-10247289
                       A1
                                                                  2002
                                                                  1010
PRIORITY APPLN. INFO.:
                                           DE 2002-10247289
                                                                  2002
                                                                  1010
AB
    Microporous, H2O-insol. polymer particles containing odorants are
```

AB Microporous, H2O-insol. polymer particles containing odorants are useful as additives in solid detergents, especially in dishwashing rinses for improving odor of dishwashing machine interior after the machine is opened upon completion of the washing cycle. For example, adding 10 g citrus oil to 10 g porous polypropylene particles (Accurel MP 1003) and stirring the mixture for several hours gave particles floatable on H2O surface. Adding 160 mg of the above particles to 40 g of a com. dishwashing detergent powder and testing the detergent in a com. dishwasher gave a dishwashing liquor having pleasant

```
citrus-like odor.
     9002-88-4, Polyethylene 24937-78-8,
IΤ
     Ethylene-vinyl acetate copolymer
     RL: TEM (Technical or engineered material use); USES (Uses)
        (porous particles; odorant-containing polymer particles as
        additives for granular dishwashing detergents)
RN
     9002-88-4 HCAPLUS
    Ethene, homopolymer (9CI) (CA INDEX NAME)
CN
     CM
          1
     CRN
         74-85-1
     CMF C2 H4
H_2C = CH_2
     24937-78-8 HCAPLUS
DM
CN
     Acetic acid ethenyl ester, polymer with ethene (9CI) (CA INDEX
    NAME)
     CM
          1
     CRN 108-05-4
     CMF C4 H6 O2
ACO-CH-CH2
     CM
          2
     CRN 74-85-1
     CMF C2 H4
H_2C = CH_2
IC
    ICM C11D003-50
     ICS C11D003-37
CC
     46-6 (Surface Active Agents and Detergents)
ST
    polymer porous particle odor carrier machine dishwashing
    detergent; polypropylene porous particle odor carrier
    machine dishwashing detergent; citrus oil porous
    polypropylene particle blend machine dishwashing detergent
    Essential oils
TΤ
    RL: MOA (Modifier or additive use); TEM (Technical or engineered
    material use); USES (Uses)
        (citrus; odorant-containing polymer particles as additives for
        granular dishwashing detergents)
IT
    Detergents
        (dishwashing, granular; odorant-containing polymer particles as
        additives for granular dishwashing detergents)
IT
    Odor and Odorous substances
        (odorant-containing polymer particles as additives for granular
        dishwashing detergents)
IT
    Polyamides, uses
    RL: TEM (Technical or engineered material use); USES (Uses)
        (porous particles; odorant-containing polymer particles as
        additives for granular dishwashing detergents)
IT
    9003-07-0, Accure MP 1003
    RL: TEM (Technical or engineered material use); USES (Uses)
        (porous particles, Accurel MP 1003; odorant-containing polymer
```

```
particles as additives for granular dishwashing
detergents)
```

9002-88-4, Polyethylene 24937-78-8, ΙT

Ethylene-vinyl acetate copolymer

RL: TEM (Technical or engineered material use); USES (Uses) (porous particles; odorant-containing polymer particles as additives for granular dishwashing detergents)

L129 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2003:856014 HCAPLUS

DOCUMENT NUMBER:

139:338812

TITLE:

Compositions comprising a dispersant and microcapsules containing an active

material

INVENTOR(S):

Uchiyama, Hirotaka; Cetti, Jonathan Robert; Alonso, Mario; Montezinos, David Lee; Cobb,

Daniel Scott

PATENT ASSIGNEE(S):

The Procter & Gamble Company, USA

SOURCE:

PCT Int. Appl., 32 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

P#	PATENT NO.					KIND DATE				DATE						
	2002	A2		2002	20031030			WO 2003-US11531								
WC	2003089561				AZ		2003	1030		WO Z	003-	0311	231		2003	
												0416				
WC	2003	A 3		2004												
	W:						AU,									
							CZ,									
			-		-		HR,		-				-		-	
							LR,									
							NO,									
							TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	UZ,	
	DEI.	•	VN,		•	•		CD.	0.1	0.7	me	110	714	177.7	7.14	
	RW:				-		MZ,									
							RU,									
		•	-				TR,						•			
										CF,	CG,	CI,	CP1,	GA,	GIV,	
110	GQ, GW, ML, US 2003216488									ווק פוו	003-	4056	78			
02	2003	2101	••		•••	111 20031120 05 2003 103070								2003		
															0402	
CA	2479	193			AA		2003	1030		CA 2	003-	2479	193			
-	CA 2475155													2003		
															0416	
EF	1495	102			A2		2005	0112								
										2003						
															0416	
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	
		MC,	PT,	ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	
			HU,	SK												
JE	2005	5230	93		T2		2005	0804								
															2003	
															0416	
PRIORIT	Y APP	LN.	INFO	.:					US 2002-373439P						P	
										2002						
									/						0418	
WO 2003 \ \ \ \ \ US11531											.9					
WO 2003-0511531											1	-				
											2003					
								/				\			0416	
								(1				
Les Hen	derso	n							Pag	e 13						
								\	_			1				

571-272-2538

AB Compns. for providing controlled-release of an active material comprise a dispersant and microcapsules containing the active material. The compns. contain the dispersant and/or microcapsules at relatively low levels to avoid neg. impacting the surfaces treated with the compns. The active material is preferably a perfume and the composition provides a controlled-release scent, along with controlling malodor when the compns. further comprise optional odor control agent. Methods of providing a controlled-release of an active material on a surface comprise the step of contacting the surface with a composition comprising a dispersant and microcapsules containing an active material. Thus, a composition comprised polyoxymethylene urea microcapsule containing active material 0.1, acrylic polymer 0.35, diethylene glycol 0.1, polyoxyalkylene modified polydimethylsiloxane 0.1, perfume 0.1, hydroxypropyl β -cyclodextrin 1.1, and ethanol 3%, and water. 9002-88-4 9003-53-6, Polystyrene 9004-57-3, Ethyl cellulose IT 24937-78-8, Ethylene-vinyl acetate copolymer RL: TEM (Technical or engineered material use); USES (Uses) (microcapsule; compns. comprising dispersants and microcapsules containing active materials) 9002-88-4 HCAPLUS RN Ethene, homopolymer (9CI) (CA INDEX NAME) CN 1 CM CRN 74-85-1 CMF C2 H4 $H_2C == CH_2$ RN 9003-53-6 HCAPLUS CN Benzene, ethenyl-, homopolymer (9CI) (CA INDEX NAME) CM CRN 100-42-5 CMF C8 H8 $H_2C = CH - Ph$ 9004-57-3 HCAPLUS RNCellulose, ethyl ether (8CI, 9CI) (CA INDEX NAME) CN CM 9004-34-6 CRN CMF Unspecified CCI PMS, MAN *** STRUCTURE DIAGRAM IS NOT AVAILABLE *** CM CRN 64-17-5 CMF C2 H6 O

H3C-СH2-ОН

```
RN
    24937-78-8 HCAPLUS
CN
    Acetic acid ethenyl ester, polymer with ethene (9CI) (CA INDEX
    NAME)
    CM
          1
    CRN 108-05-4
     CMF C4 H6 O2
ACO-CH-CH2
          2
    CM
    CRN
         74-85-1
    CMF C2 H4
H_2C = CH_2
TC
    ICM C11D017-00
    ICS C11D003-22; C11D003-50; C11D003-00; D06M013-00; A61L009-01
CC
    38-3 (Plastics Fabrication and Uses)
    Section cross-reference(s): 40, 46
ST
    compn dispersant microcapsules contq active material;
    polyoxymethylene urea microcapsule acrylic polymer compn
IT
    Waxes
    RL: TEM (Technical or engineered material use); USES (Uses)
        (animal, microcapsule; compns. comprising dispersants
        and microcapsules containing active materials)
TT
    Aerosols
    Dispersing agents
    Microcapsules
        (compns. comprising dispersants and microcapsules
        containing active materials)
IT
    Detergents
    Textiles
        (compns. comprising dispersants and microcapsules
        containing active materials for)
    Acrylic polymers, uses
TT
    Clays, uses
    Polysaccharides, uses
    RL: TEM (Technical or engineered material use); USES (Uses)
        (dispersants; compns. comprising dispersants
        and microcapsules containing active materials)
IT
    Aminoplasts
    Paraffin waxes, uses
    Phenolic resins, uses
    Polyamides, uses
    Polyesters, uses
    Zeins
    RL: TEM (Technical or engineered material use); USES (Uses)
        (microcapsule; compns. comprising dispersants and
        microcapsules containing active materials)
IT
    Gelatins, uses
    Polyurethanes, uses
    RL: TEM (Technical or engineered material use); USES (Uses)
        (microcapsules; compns. comprising dispersants and
       microcapsules containing active materials)
ΙT
    Epoxides
    RL: TEM (Technical or engineered material use); USES (Uses)
        (polymers, microcapsule; compns. comprising dispersants
```

```
and microcapsules containing active materials)
IT
     Polyureas
     RL: TEM (Technical or engineered material use); USES (Uses)
        (polyoxyalkylene-, microcapsules; compns. comprising
        dispersants and microcapsules containing active materials
        for)
     Polyoxyalkylenes, uses
ΙT
     RL: TEM (Technical or engineered material use); USES (Uses)
         (polyurea-, microcapsules; compns. comprising
        dispersants and microcapsules containing active materials
        for)
TТ
     Waxes
     RL: TEM (Technical or engineered material use); USES (Uses)
         (vegetable, microcapsule; compns. comprising
        dispersants and microcapsules containing active materials)
     75-35-4D, polymers
     RL: TEM (Technical or engineered material use); USES (Uses)
        (Saran, microcapsule; compns. comprising dispersants
        and microcapsules containing active materials)
ΙT
     7631-86-9, Fumed silica, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (colloidal, dispersant; compns. comprising
        dispersants and microcapsules containing active materials)
     9000-30-0, Guar gum 9000-69-5, Pectin 9005-32-7, Alginic acid 9036-66-2, Arabinogalactan 11138-66-2, Xanthan gum 71010-52-1,
ΙT
     Gellan gum 303154-44-1, Alcogum SL 511
     RL: TEM (Technical or engineered material use); USES (Uses)
        (dispersant; compns. comprising dispersants
        and microcapsules containing active materials)
     57-13-6D, Urea, polyoxyalkylene derivs. 108-78-1D, Melamine,
     polyoxyalkylene derivs. 9002-81-7D, Polyoxymethylene, amine
     modified 9002-83-9, Polychlorotrifluoroethylene
     9002-88-4
                9002-89-5, Polyvinyl alcohol 9003-08-1,
     Melamine-formaldehyde copolymer 9003-35-4, Phenol-formaldehyde
     copolymer 9003-39-8, Polyvinyl pyrrolidone 9003-53-6, Polystyrene 9004-35-7, Cellulose acetate 9004-36-8,
     Cellulose acetate butyrate 9004-57-3, Ethyl
     cellulose 9004-70-0, Cellulose nitrate 9011-05-6,
     Urea-formaldehyde copolymer 24937-78-8, Ethylene-vinyl
     acetate copolymer
     RL: TEM (Technical or engineered material use); USES (Uses)
        (microcapsule; compns. comprising dispersants and
        microcapsules containing active materials)
L129 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                          2003:855838 HCAPLUS
DOCUMENT NUMBER:
                          139:339307
TITLE:
                         Malodor-controlling compositions
                          comprising odor control agents and
                          microcapsules containing active material
                          Uchiyama, Hirotaka; Cetti, Jonathan Robert; Alonso, Mario; Montezinos, David Lee; Cobb,
INVENTOR(S):
                          Daniel Scott
                          The Procter & Gamble Company, USA
PATENT ASSIGNEE(S):
                                                                                   SOURCE:
                          PCT Int. Appl., 33 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:
                          Patent
LANGUAGE:
                          English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                                                      DATE
     PATENT NO.
                          KIND
                                 DATE
                                            APPLICATION NO.
     ------
                      A1
                                              WO 2003-US11530
     WO 2003089019
                                 20031030
```

2003

```
0416
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA,
              CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI,
              GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,
              KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,
              MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
              AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ,
              DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL,
              PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     US 2003215417
                                    20031120
                                                 US 2003-405455
                             A1
                                                                            2003
                                                                            0402
     CA 2479192
                             AA
                                    20031030
                                                 CA 2003-2479192
                                                                            2003
                                                                            0416
     EP 1496949
                             Δ1
                                    20050119
                                                 EP 2003-746988
                                                                            2003
                                                                            0416
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     JP 2005523078
                             T2
                                    20050804
                                                 JP 2003-585770
                                                                            2003
                                                                            0416
PRIORITY APPLN. INFO.:
                                                 US 2002-373718P
                                                                            2002
                                                                            0418
                                                 WO 2003-US11530
                                                                            2003
                                                                            0416
     H2O-based malodor-controlling compns. comprise
     microcapsules containing an active material, preferably perfume,
     and/or an optional odor control agent, an odor control agent
     outside of the microcapsules, and an aqueous carrier. The composition provides a controlled-release scent, along with controlling
     malodor. Methods of reducing or
     removing malodor from a surface having
     malodor comprise the step of contacting the surface with a
     malodor-controlling composition comprising microcapsules containing
     an active material and an odor control agent. A typical
     microcapsule contained gelatin 0.05, polyoxyalkylene-modified
     poly(dimethylsiloxane) 0.1, ethoxylated hydrogenated castor oil
     0.2, didecyldimethylammonium chloride 0.125, perfume 0.010,
     methylated β-cyclodextrin 1.00, EtOH 5.00,
     acrylate/aminoacrylate copolymer (unspecified) 0.25, citric acid
     0.2 parts and H2O balance.
IT
     9003-53-6, Polystyrene 9004-57-3,
     Ethyl cellulose 24937-78-8,
     Ethylene-Vinyl acetate copolymer
     RL: TEM (Technical or engineered material use); USES (Uses)
         (microcapsules; malodor-controlling compns.
         comprising odor control agents and microcapsules containing active
        material)
RN
     9003-53-6 HCAPLUS
CN
     Benzene, ethenyl-, homopolymer (9CI) (CA INDEX NAME)
     CM
     CRN 100-42-5
```

CMF C8 H8

```
H_2C = CH - Ph
RN
     9004-57-3 HCAPLUS
CN
     Cellulose, ethyl ether (8CI, 9CI) (CA INDEX NAME)
     CM
     CRN 9004-34-6
     CMF
         Unspecified
     CCI PMS, MAN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     CM
          2
     CRN 64-17-5
     CMF C2 H6 O
_{\rm H_3C^-CH_2^-OH}
     24937-78-8 HCAPLUS
RN
     Acetic acid ethenyl ester, polymer with ethene (9CI) (CA INDEX
CN
     CM
          1
     CRN 108-05-4
     CMF C4 H6 O2
Aco-CH=CH2
          2 .
     CM
     CRN 74-85-1
     CMF C2 H4
H_2C = CH_2
ΙT
     9002-88-4, Polyethylene
     RL: TEM (Technical or engineered material use); USES (Uses)
        (wax, microcapsules; malodor-controlling compns.
        comprising odor control agents and microcapsules containing active
        material)
RN
     9002-88-4 HCAPLUS
CN
     Ethene, homopolymer (9CI) (CA INDEX NAME)
     CM
     CRN 74-85-1
     CMF C2 H4
H_2C = CH_2
```

ICM A61L009-01

```
A61L009-012; A61L009-014; A61L009-14; A61L015-46; C11D003-50;
          D06M013-00; D06M023-12
     46-6 (Surface Active Agents and Detergents)
CC
     Section cross-reference(s): 40
IT
     Creaseproofing
        (agents, microencapsulated; malodor-controlling
        compns. comprising odor control agents and microcapsules containing
        active material)
IT
     Waxes
     RL: TEM (Technical or engineered material use); USES (Uses)
        (animal, microcapsules; malodor-controlling compns.
        comprising odor control agents and microcapsules containing active
        material)
IT
     Detergents
        (cleaning compns., hard surface cleaners, microencapsulated;
        malodor-controlling compns. comprising odor control
        agents and microcapsules containing active material)
IT
     Cosmetics
     Hair preparations
        (conditioners, microencapsulated; malodor-controlling
        compns. comprising odor control agents and microcapsules containing
        active material)
TΤ
     Polyoxyalkylenes, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (di-Me polysiloxane-, microencapsulated; malodor
        -controlling compns. comprising odor control agents and
        microcapsules containing active material)
ΤТ
     Polyoxyalkylenes, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (di-Me, Me hydrogen polysiloxane-, microencapsulated, Silwet L 7600; malodor-controlling compns. comprising odor
        control agents and microcapsules containing active material)
IT
     Polysiloxanes, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (di-Me, Me hydrogen, polyoxyalkylene-, microencapsulated,
        Silwet L 7600; malodor-controlling compns. comprising
        odor control agents and microcapsules containing active material)
TT
     Polysiloxanes, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (di-Me, polyoxyalkylene-, microencapsulated; malodor
        -controlling compns. comprising odor control agents and
        microcapsules containing active material)
IT
     Castor oil
     RL: TEM (Technical or engineered material use); USES (Uses)
        (hydrogenated, ethoxylated, microencapsulated; malodor
        -controlling compns. comprising odor control agents and microcapsules containing active material)
TT
     Deodorants
     Microcapsules
        (malodor-controlling compns. comprising odor control
        agents and microcapsules containing active material)
IT
     Acrylic polymers, uses
     Aminoplasts
     Epoxy resins, uses
     Gelatins, uses
     Paraffin waxes, uses
     Phenolic resins, uses
     Polyamides, uses
     Polyurethanes, uses
     Zeins
     RL: TEM (Technical or engineered material use); USES (Uses)
        (microcapsules; malodor-controlling compns.
        comprising odor control agents and microcapsules containing active
        material)
IT
     Hydrocarbon waxes, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
```

```
(microcryst., microcapsules; malodor-controlling
        compns. comprising odor control agents and microcapsules containing
        active material)
    Antimicrobial agents
    Antistatic agents
       Fabric softeners
     Fireproofing agents
     Flavoring materials
    Fluorescent brighteners
     Fungicides
     Insect repellents
     Perfumes
    Repellents
    UV stabilizers
        (microencapsulated; malodor-controlling compns.
        comprising odor control agents and microcapsules containing active
       material)
IT
     Polyoxyalkylenes, uses
    RL: TEM (Technical or engineered material use); USES (Uses)
        (reaction products with hydrogenated castor oil,
       microencapsulated; malodor-controlling compns.
       comprising odor control agents and microcapsules containing active
       material)
TΤ
    Repellents
        (rodent, microencapsulated; malodor-controlling
       compns. comprising odor control agents and microcapsules containing
       active material)
TΤ
    Waxes
    RL: TEM (Technical or engineered material use); USES (Uses)
        (vegetable, microcapsules; malodor-controlling
       compns. comprising odor control agents and microcapsules containing
       active material)
IT
    Clays, uses
    RL: TEM (Technical or engineered material use); USES (Uses)
        (water-swellable, microencapsulated; malodor
        -controlling compns. comprising odor control agents and
       microcapsules containing active material)
IT
    7631-86-9, Silica, uses
    RL: TEM (Technical or engineered material use); USES (Uses)
        (fumed, microencapsulated; malodor-controlling
       compns. comprising odor control agents and microcapsules containing
       active material)
IT
    75-35-4D, polymers
    RL: TEM (Technical or engineered material use); USES (Uses)
        (microcapsules, Saran; malodor-controlling compns.
       comprising odor control agents and microcapsules containing active
       material)
    9002-83-9, Poly(chlorotrifluoroethylene)
                                              9002-89-5, Poly(vinyl
IT
    alcohol) 9003-08-1, Formaldehyde-Melamine resin
                                                         9003-35-4,
    Formaldehyde-Phenol resin 9003-39-8, Poly(vinylpyrrolidone)
    9003-53-6, Polystyrene
                             9004-35-7, Cellulose
    acetate
              9004-36-8, Cellulose acetate butyrate 9004-57-3
     , Ethyl cellulose 9004-70-0, Cellulose
    nitrate 9011-05-6, Formaldehyde-Urea resin 24937-78-8,
    Ethylene-Vinyl acetate copolymer
    RL: TEM (Technical or engineered material use); USES (Uses)
        (microcapsules; malodor-controlling compns.
       comprising odor control agents and microcapsules containing active
       material)
    50-21-5, Lactic acid, uses 111-46-6, Diethylene glycol, uses
    7173-51-5, Bardac 2250
                            7585-39-9D, β-Cyclodextrin,
                            71010-52-1, Gellan gum 615564-27-7,
    hydroxypropyl derivs.
    Cremophor CO 60 615564-62-0, Alcogum L 511
    RL: TEM (Technical or engineered material use); USES (Uses)
        (microencapsulated; malodor-controlling compns.
       comprising odor control agents and microcapsules containing active
```

```
material)
```

25322-68-3, Polyethylene glycol IT

RL: TEM (Technical or engineered material use); USES (Uses) (reaction products with hydrogenated castor oil, microencapsulated; malodor-controlling compns. comprising odor control agents and microcapsules containing active

material)

ΙT 9002-88-4, Polyethylene

RL: TEM (Technical or engineered material use); USES (Uses) (wax, microcapsules; malodor-controlling compns.

comprising odor control agents and microcapsules containing active

material)

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L129 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2000:608628 HCAPLUS

DOCUMENT NUMBER:

133:213254

TITLE:

Layer materials treated with

surfactant-modified hydrophobic odor

control agents

INVENTOR(S):

Liu, Yuelong; Quincy, Roger Bradshaw, III;

PATENT ASSIGNEE(S):

Woltman, Garry Roland Kimberly-Clark Worldwide, Inc., USA PCT Int. Appl., 29 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	TENT				KIN	_	DATE		APPLICATION NO.						DATE
		 2000050099 A1 20000831 WO 2000-US4728													
WO	2000	0500	99		AI		2000	0831	,	WO 2	000-	US47	28		2000
															0224
	W:						AZ,								
				•			DM,				-				•
				•	•		IS,		•						•
		-	-	-	-	-	MA, SE,	-	-	-					
							YU,		•	•					-
		•	TJ,	•	02,	VIV,	10,	ΔA,	411,	Дυ,	AU,	ы,	KG,	κω,	PID,
	RW:				LS.	MW.	SD,	SL.	SZ.	TZ.	UG.	ZW.	AT.	BE.	CH.
	••••						FR,								
		SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,
		TD,	TG												
US	6479	150			B1		2002	1112	1	US 1	999-	4729	34		
															1999
	1154	005					0001			- n					1228
EP	1154	805			AI		2001	1121	,	EP Z	000-	9087	84		2000
															0224
	R.	AT.	BE	CH.	DE.	DK.	ES.	FR.	GB.	GR.	TT.	ЪT.	LII.	NI.	SE,
		•					LV,		-	J.,	,	,	_,	,	22,
BR	2000									BR 2	000-	8455			
															2000
															0224
JP	2002	5370	71		T2		2002	1105	i	JP 2	000-	6007	09		
															2000
	=====												_		0224
AU	7643	13			В2		2003	18T4	1	AU 2	000-	3006	2		2000
															2000 0224
															0224

```
ZA 2001006208
                                 20021126
                                              ZA 2001-6208
                                                                      2001
                                                                      0727
PRIORITY APPLN. INFO.:
                                              US 1999-121737P
                                                                      1999
                                                                      0226
                                              US 1999-472934
                                                                      1999
                                                                      1228
                                              WO 2000-US4728
                                                                      2000
                                                                      0224
AB
     A treated layer material has at least one hydrophilic,
     odor-absorbing surface which is wettable to aqueous liqs. and capable
     of controlling a wide variety of malodors. The layer material is treated with a hydrophilic surfactant
     -modified odor control agent prepared by mixing or chemical reacting a
     hydrophobic odor control agent with a surfactant or
     surfactant producing compound Preferred hydrophobic compds.
     comprise aromatic compds. such as hexachlorophene, Calixarene derivs.
     or alkylmodified cyclophanes. The layer material thus treated can
     be used in a wide variety of personal care and medical absorbent
     products.
IT
     24937-78-8, Eva 26338-34-1, Propylene-vinyl
     acetate copolymer
     RL: DEV (Device component use); MOA (Modifier or additive use);
     THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (layer materials treated with surfactant-modified
        hydrophobic odor control agents)
RN
     24937-78-8 HCAPLUS
CN
     Acetic acid ethenyl ester, polymer with ethene (9CI) (CA INDEX
     NAME)
     CM
          1
     CRN 108-05-4
     CMF C4 H6 O2
Aco-CH-CH2
     CM
          2
     CRN 74-85-1
     CMF C2 H4
H_2C == CH_2
RN
     26338-34-1 HCAPLUS
CN
     Acetic acid ethenyl ester, polymer with 1-propene (9CI) (CA INDEX
     NAME)
     CM
          1
     CRN 115-07-1
     CMF C3 H6
```

```
H_3C-CH=CH_2
     CM
          2
     CRN 108-05-4
     CMF C4 H6 O2
Aco-CH-CH2
    ICM A61L015-46
IC
    ICS A61L015-48
    63-8 (Pharmaceuticals)
CC
     Section cross-reference(s): 40
ST
    medical layered material deodorant surfactant
TΥ
    Medical goods
    Medical goods
        (absorbents; layer materials treated with surfactant
        -modified hydrophobic odor control agents)
IT
        (bandages; layer materials treated with surfactant
        -modified hydrophobic odor control agents)
IT
    Metacyclophanes
    RL: DEV (Device component use); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (calixarenes; layer materials treated with surfactant
        -modified hydrophobic odor control agents)
IT
    Medical goods
        (fabrics; layer materials treated with surfactant
        -modified hydrophobic odor control agents)
TΥ
    Deodorants
    Diapers
      Surfactants
        (layer materials treated with surfactant-modified
        hydrophobic odor control agents)
    Polyoxyalkylenes, biological studies
IT
    RL: DEV (Device component use); MOA (Modifier or additive use);
    THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (layer materials treated with surfactant-modified
        hydrophobic odor control agents)
IT
    Polyolefin rubber
    Polyolefins
    Polyurethanes, biological studies
    Synthetic fibers
    RL: DEV (Device component use); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (layer materials treated with surfactant-modified
        hydrophobic odor control agents)
TΤ
    Absorbents
    Absorbents
        (medical; layer materials treated with surfactant
        -modified hydrophobic odor control agents)
ΙT
    Medical goods
        (sanitary napkins; layer materials treated with
        surfactant-modified hydrophobic odor control agents)
ΙT
    Plastics, biological studies
    RL: DEV (Device component use); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (thermoplastics; layer materials treated with
        surfactant-modified hydrophobic odor control agents)
    557-75-5D, Vinyl alcohol, polymers 9003-01-4, Polyacrylic acid
    9003-17-2, Polybutadiene 9003-27-4, Polyisobutylene 9003-39-8,
```

```
Pvp 9010-85-9, Isobutylene-isoprene copolymer 24937-78-8
     , Eva 25322-68-3, Peg 25322-69-4, Polypropylene glycol
     26338-34-1, Propylene-vinyl acetate copolymer
     RL: DEV (Device component use); MOA (Modifier or additive use);
     THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (layer materials treated with surfactant-modified
        hydrophobic odor control agents)
     70-30-4, Hexachlorophene
TΤ
     RL: DEV (Device component use); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (layer materials treated with surfactant-modified
       hydrophobic odor control agents)
REFERENCE COUNT:
                              THERE ARE 2 CITED REFERENCES AVAILABLE
                        2
                              FOR THIS RECORD. ALL CITATIONS AVAILABLE
                               IN THE RE FORMAT
```

L129 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2000:608627 HCAPLUS

DOCUMENT NUMBER:

133:213253

TITLE:

Layer materials treated with

surfactant-modified chelating agents

Quincy, Roger Bradshaw, III; Woltman, Garry Roland; Liu, Yuelong; Hwang, Patricia Hsiaoyin

PATENT ASSIGNEE(S): Kimberly-Clark Worldwide, Inc., USA

SOURCE:

PCT Int. Appl., 60 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

INVENTOR(S):

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT					KIN		DATE		APPLICATION NO.				APPLICATION NO.						DATE
WO	2000	- 0500	98		A1 20000831					WO 2000-US4695									
		CR, HR, LR, PL, TZ, GH, CY,	CU, HU, LS, PT, UA, GM, DE,	CZ, ID, LT, RO, UG, KE, DK,	DE, IL, LU, RU, UZ, LS, ES,	DK, IN, LV, SD, VN, MW, FI,	DM, IS, MA, SE, YU, SD, FR,	EE, JP, MD, SG, ZA, SL, GB,	ES, KE, MG, SI, ZW SZ, GR,	BG, FI, KG, MK, SK,	GB, KP, MN, SL, UG, IT,	GD, KR, MW, TJ, ZW, LU,	GE, KZ, MX, TM, AT, MC,	GH, LC, NO, TR, BE, NL,	GM, LK, NZ, TT, CH, PT,				
110	6509:	TD,	TG							GN,				ΝE,	SN,				
															1999 1228				
EP	1154	806			A1	:	2001	1121	EP 2000-913594						2000 0224				
EP	11548																		
22		MC,	PT,	IE,	SI,	LT,	LV,	FI,	RO	GR,	•		LU,	NL,	SE,				
	2000														2000 0224				
JP	2002	5375	01		T2	:	2002:	1105	•	JP 20	000-	6007	80		2000 0224				
AU	76273	32			В2	:	2003	0703	i	AU 20	000-	3500	9		2000				
ZA	20010	0062	07		Α	:	2002:	1028	:	ZA 20	001-	5207			0224				

```
2001
                                                                      0727
PRIORITY APPLN. INFO.:
                                              US 1999-121934P
                                                                      1999
                                                                      0226
                                              US 1999-472632
                                                                      1999
                                                                      1228
                                              US 1999-121933P
                                                                      1999
                                                                      0226
                                              WO 2000-US4695
                                                                      2000
                                                                      0224
AB
     A thermoplastic layer material has at least one odor-reducing
     surface which is wettable to aqueous liqs. and capable of controlling
     a wide variety of malodors. The thermoplastic layer
     material is treated with a surfactant-modified chelating
     agent prepared by mixing or chemical reacting an odor-control chelating
     agent with a surfactant-producing compound The layer material thus treated can be used in a wide variety of personal
     care and medical absorbent products, as well as other
     applications. A combination of di-Na EDTA and Ahcovel (a
     surfactant mixture of ethoxylated hydrogenated castor oil
     and sorbitan monooleate) showed good inhibition of ammonia
     formation generated from synthetic urine.
     24937-78-8, Eva 26338-34-1, Propylene-vinyl
     acetate copolymer
     RL: DEV (Device component use); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (layer materials treated with surfactant-modified
        chelating agents as deodorants)
RN
     24937-78-8 HCAPLUS
CN
     Acetic acid ethenyl ester, polymer with ethene (9CI) (CA INDEX
     NAME)
          1
     CM
     CRN 108-05-4
     CMF C4 H6 O2
Aco-CH=CH2
     CM
          2
     CRN 74-85-1
     CMF C2 H4
H_2C = CH_2
     26338-34-1 HCAPLUS
     Acetic acid ethenyl ester, polymer with 1-propene (9CI) (CA INDEX
CN
     NAME)
     CM
          1
```

CRN 115-07-1

CMF C3 H6 $H_3C-CH=CH_2$ CM 2 CRN 108-05-4 CMF C4 H6 O2 ACO-CH-CH2 IC ICM A61L015-46 ICS A61L015-48 63-8 (Pharmaceuticals) medical layer material surfactant chelating agent; ST deodorant medical layer material IT Medical goods Medical goods (absorbents; layer materials treated with surfactant -modified chelating agents as deodorants) TΤ Medical goods (bandages; layer materials treated with surfactant -modified chelating agents as deodorants) IT Castor oil RL: DEV (Device component use); MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (hydrogenated, ethoxylated, mixture with sorbitan monooleate; layer materials treated with surfactant-modified chelating agents as deodorants) IT Medical goods (incontinence devices; layer materials treated with surfactant-modified chelating agents as deodorants) IT Chelating agents Deodorants Diapers Surfactants (layer materials treated with surfactant-modified chelating agents as deodorants) Polysiloxanes, biological studies Polyurethanes, biological studies IT Synthetic fibers Synthetic rubber, biological studies RL: DEV (Device component use); MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (layer materials treated with surfactant-modified chelating agents as deodorants) IT Polyolefins RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (layer materials treated with surfactant-modified chelating agents as deodorants) IT Absorbents Absorbents (medical; layer materials treated with surfactant -modified chelating agents as deodorants) IT Medical goods (sanitary napkins; layer materials treated with surfactant-modified chelating agents as deodorants) TT Plastics, biological studies

RL: DEV (Device component use); MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

5

```
(thermoplastics; layer materials treated with
         surfactant-modified chelating agents as deodorants)
      60-00-4, Edta, biological studies 67-43-6, Dtpa 139-13-9,
TT
      Nitrilotriacetic acid 139-33-3, Disodium edta 139-89-9
      140-01-2, Glycine, N,N-bis[2-[bis(carboxymethyl)amino]ethyl]-,
      pentasodium salt 687-33-2 687-34-3 688-21-1 9003-17-2,
     Polybutadiene 9003-27-4, Polyisobutylene 9010-85-9, Isobutylene-isoprene copolymer 20846-91-7, Ethylenediamine-N,N'-disuccinic acid 24937-78-8, Eva 25637-70-1D,
      Cyclohexanediaminetetraacetic acid, sodium salts
      26338-34-1, Propylene-vinyl acetate copolymer
      33872-70-7, Hydroxyethylenediaminetriacetic acid 58539-29-0
      159655-26-2 161122-29-8 186397-84-2 204910-17-8 204910-18-9 206886-68-2. Sodium laurovlethylenediam
                      206886-68-2, Sodium lauroylethylenediaminetriacetate
      204910-18-9
      289888-72-8 290308-49-5 290308-50-8
      RL: DEV (Device component use); THU (Therapeutic use); BIOL
      (Biological study); USES (Uses)
         (layer materials treated with surfactant-modified
         chelating agents as deodorants)
REFERENCE COUNT:
                                    THERE ARE 4 CITED REFERENCES AVAILABLE
                                    FOR THIS RECORD. ALL CITATIONS AVAILABLE
                                    IN THE RE FORMAT
L129 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                             2000:608626 HCAPLUS
DOCUMENT NUMBER:
                             133:213252
                             Water-absorbent materials treated with
TITLE:
                             surfactant-modified cyclodextrins
INVENTOR(S):
                             Woltman, Garry Roland; Liu, Yuelong; Quincy,
                             Roger Bradshaw, III
PATENT ASSIGNEE(S):
                             Kimberly-Clark Worldwide, Inc., USA
SOURCE:
                             PCT Int. Appl., 29 pp.
                             CODEN: PIXXD2
DOCUMENT TYPE:
                             Patent
LANGUAGE:
                             English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:
                       KIND
      PATENT NO.
                                                  APPLICATION NO.
                                                                              DATE
                                     DATE
      -----
     WO 2000050097 A1
                                     20000831 WO 2000-US4679
                                                                               2000
                                                                               0224
          W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ,
               PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
               TZ, UA, UG, UZ, VN, YU, ZA, ZW
          RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN,
               TD, TG
                              B1 20020813 US 1999-472719
     US 6433243
                                                                               1999
                                                                               1228
PRIORITY APPLN. INFO.:
                                                   US 1999-121933P
                                                                               1999
                                                                               0226
                                                    US 1999-472719
```

US 1999-121934P

1999 1228

1999 0226

A thermoplastic porous water-permeable layer material has at least AB one odor-reducing surface which is wettable to aqueous liqs. and capable of controlling a wide variety of malodors. The thermoplastic water-permeable layer material is treated with a surfactant-modified cyclodextrin prepared by mixing or chemical reacting a cyclodextrin-based odor absorbing material with a surfactant-producing compound The layer material thus treated can be used in a wide variety of personal care and medical absorbent products, as well as other applications. The benefit of using surfactant-modified cyclodextrins $(\beta$ -cyclodextrin 2-ethylhexylglycidyl ether) as treatment for water permeable porous layer materials (melt-blown polypropylene fibers and weight pulp fibers) was demonstrated. 9010-79-1, Ethylene-propylene copolymer 24937-78-8 IT , Eva 26338-34-1, Propylene-vinyl acetate copolymer RL: DEV (Device component use); POF (Polymer in formulation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (water-absorbent materials treated with surfactant -modified cyclodextrins) 9010-79-1 HCAPLUS RN 1-Propene, polymer with ethene (9CI) (CA INDEX NAME) CN 1 CM CRN 115-07-1 CMF C3 H6 H3C-CH=CH2 CM 2 CRN 74-85-1 CMF C2 H4 $H_2C = CH_2$ 24937-78-8 HCAPLUS PM Acetic acid ethenyl ester, polymer with ethene (9CI) (CA INDEX NAME) CM 1 CRN 108-05-4 CMF C4 H6 O2 Aco-CH-CH2 CM 2 CRN 74-85-1

CMF C2 H4

```
H_2C = CH_2
     26338-34-1 HCAPLUS
RN
CN
     Acetic acid ethenyl ester, polymer with 1-propene (9CI) (CA INDEX
     NAME)
     CM
     CRN 115-07-1
     CMF C3 H6
H_3C-CH=CH_2
     CM
          2
     CRN 108-05-4
     CMF C4 H6 O2
ACO-CH-CH2
IC
     ICM A61L015-46
     ICS A61L015-48
CC
     63-8 (Pharmaceuticals)
ST
    medical absorbent surfactant cyclodextrin
    Medical goods
TT
    Medical goods
        (absorbents; water-absorbent materials treated with
        surfactant-modified cyclodextrins)
IT
    Medical goods
        (bandages; water-absorbent materials treated with
        surfactant-modified cyclodextrins)
IT
    Medical goods
        (dressings; water-absorbent materials treated with
        surfactant-modified cyclodextrins)
тт
    Medical goods
        (incontinence devices; water-absorbent materials treated with
        surfactant-modified cyclodextrins)
IT
     Absorbents
    Absorbents
        (medical; water-absorbent materials treated with
        surfactant-modified cyclodextrins)
TΤ
    Polyethers, biological studies
    Polyethers, biological studies
    RL: DEV (Device component use); POF (Polymer in formulation); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (polyester-; water-absorbent materials treated with
        surfactant-modified cyclodextrins)
IT
    Polyesters, biological studies
    Polyesters, biological studies
    RL: DEV (Device component use); POF (Polymer in formulation); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (polyether-; water-absorbent materials treated with
        surfactant-modified cyclodextrins)
IT
    Medical goods
        (sanitary napkins; water-absorbent materials treated with
        surfactant-modified cyclodextrins)
IT
    Deodorants
    Diapers
       Surfactants
```

```
(water-absorbent materials treated with surfactant
        -modified cyclodextrins)
ΙT
     Polyamides, biological studies
     Polyethers, biological studies
     Polyolefin rubber
     Polyolefins
     Polysiloxanes, biological studies
     Polyurethanes, biological studies
     Synthetic rubber, biological studies
     RL: DEV (Device component use); POF (Polymer in formulation); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (water-absorbent materials treated with surfactant
        -modified cyclodextrins)
IT
     7585-39-9, β-Cyclodextrin
                                  10016-20-3, \alpha-Cyclodextrin
     17465-86-0, \gamma-Cyclodextrin
     RL: DEV (Device component use); MOA (Modifier or additive use);
     POF (Polymer in formulation); PRP (Properties); THU (Therapeutic
     use); BIOL (Biological study); USES (Uses)
        (water-absorbent materials treated with surfactant
        -modified cyclodextrins)
IT
     2461-15-6D, reaction with β-cyclodextrin
     β-Cyclodextrin, reaction with 2-ethylhexylglycidyl
     9003-07-0, Polypropylene 9003-17-2, Polybutadiene 9019-79-1, Ethylene-propylene copolymer
     9010-85-9, Isobutylene-isoprene copolymer 24937-78-8,
     Eva 26338-34-1, Propylene-vinyl acetate copolymer
     RL: DEV (Device component use); POF (Polymer in formulation); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES
        (water-absorbent materials treated with surfactant
        -modified cyclodextrins)
                               THERE ARE 5 CITED REFERENCES AVAILABLE
REFERENCE COUNT:
                         5
                                FOR THIS RECORD. ALL CITATIONS AVAILABLE
                                IN THE RE FORMAT
L129 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         2000:401508 HCAPLUS
DOCUMENT NUMBER:
                         133:31399
TITLE:
                         Synthetic resin latex deodorizing composition
                          for application to fabric
                         Tomiko, Mouri; Kazuhiro, Fukumoto; Seiji,
INVENTOR (S):
                         Onoda; Yoshio, Yamada; Hideki, Ohno; Masako,
                          Furuta; Akihiro, Matsuyama; Shigeyoshi, Miura;
                         Shirou, Ueda
PATENT ASSIGNEE(S):
                         Toyoda Boshoku Corporation, Japan; Dainippon
                         Ink and Chemicals, Inc.
SOURCE:
                         Eur. Pat. Appl., 26 pp.
                         CODEN: EPXXDW
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                         KIND
                                DATE
                                             APPLICATION NO.
                                                                     DATE
     EP 1008623
                          A1
                                 20000614
                                             EP 1999-124488
                                                                     1999
                                                                     1208
     EP 1008623
                          B1
                                20040324
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
             MC, PT, IE, SI, LT, LV, FI, RO
     JP 2001049133
                          A2
                                 20010220
                                             JP 1999-241313
                                                                     1999
                                                                     0827
     US 6503962
                          B1
                                20030107
                                             US 1999-457470
```

```
PRIORITY APPLN. INFO.:

JP 1998-350239

JP 1999-152083

JP 1999-241313

A

1999
0531

JP 1999-241313

A

1999
0827
```

AB The title resin is for effectively deodorizing amine malodor causing substances such as trimethylamine. A synthetic resin composition comprises an aqueous medium, a surfactant, and a polymer latex and a filler, such as a transitional metal-supported silica gel and an activated C. Since the transition metal or the transition metal compound performs extremely well as a Lewis acid, it forms a complex with a Lewis base having an unpaired electron, i.e., a malodor causing substance such as amines and NH3 having a N atom with an unpaired electron. Thus, an aqueous composition (33% solids) containing acrylic acid-Bu acrylate-Et acrylate copolymer latex, surfactant, activated carbon filler, copper sulfate silica gel (preparation given), and CMC was applied on one side of polyester fabric, and dried to give a covering material, showing cigarette odor strength 2.6 (0=no odor; 5=powerful odor); vs. 3.2 for an aqueous composition containing Sepiolite instead of copper sulfate silica gel.

IT 24937-78-8, EVA

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(latex; in synthetic resin latex deodorizing composition for application to fabric)

RN 24937-78-8 HCAPLUS

CN Acetic acid ethenyl ester, polymer with ethene (9CI) (CA INDEX NAME)

CM 1

CRN 108-05-4 CMF C4 H6 O2

ACO-CH-CH2

CM 2

CRN 74-85-1 CMF C2 H4

 $H_2C \longrightarrow CH_2$

IT 9003-55-8

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(styrene-butadiene rubber, latex; in synthetic resin latex deodorizing composition for application to fabric)

RN 9003-55-8 HCAPLUS

CN Benzene, ethenyl-, polymer with 1,3-butadiene (9CI) (CA INDEX

NAME)

CM 1

CRN 106-99-0 CMF C4 H6

 $H_2C = CH - CH = CH_2$

CM 2

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

IC ICM C08K009-02

CC 37-6 (Plastics Manufacture and Processing)
 Section cross-reference(s): 40

ST transition metal silica gel deodorant; activated carbon deodorant coating; copper sulfate silica gel deodorant; acrylic latex deodorant coating fabric; amine malodor prevention latex coating

IT Styrene-butadiene rubber, properties
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(latex; in synthetic resin latex deodorizing composition for application to fabric)

1T 24937-78-8, EVA 25686-45-7, Acrylic acid-acrylonitrilebutyl acrylate copolymer 273752-77-5, Adipic acid-1,4-butanediol-dimethylolpropionic acid-piperazine-tolylene diisocyanate copolymer RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical

or engineered material use); USES (Uses)
(latex; in synthetic resin latex deodorizing composition for application to fabric)

IT 9003-55-8

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(styrene-butadiene rubber, latex; in synthetic resin latex deodorizing composition for application to fabric)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE

IN THE RE FORMAT

L129 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1985:8658 HCAPLUS

DOCUMENT NUMBER: 102:8658

TITLE: Opacifying agents for liquid cleaners

PATENT ASSIGNEE(S): Hoechst Gosei Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

Patent

CODEN: JKXXAF

DOCUMENT TYPE:

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 59117596	A2	19840706	JP 1982-230713	

JP 1982-230713

1982 1225 JP 60006999 B4 19850221

> 1982 1225

The title agents, with good stability and odor
, contain emulsions of copolymers of 100 parts mixture of 40-95%
vinyl acetate (I) and 5-60% C2H4 or vinyl C9-11 isoalkanoate,
0-300 parts vinyl chloride, 0-20 parts (meth)acrylate ester, and
0-20 parts functional vinyl monomer. Thus, 15 parts C2H4 and 85
parts I were polymerized by K2S2O8 to give a 40% copolymer [
24937-78-8] emulsion giving turbidity in liquid cleaning
compns.

IT 24937-78-8 25085-46-5 57546-92-6

RL: USES (Uses)

PRIORITY APPLN. INFO.:

(opacifiers, for liquid detergents)

RN 24937-78-8 HCAPLUS

CN Acetic acid ethenyl ester, polymer with ethene (9CI) (CA INDEX NAME)

CM 1

CRN 108-05-4 CMF C4 H6 O2

 $Aco-ch=ch_2$

CM 2

CRN 74-85-1 CMF C2 H4

 $H_2C = CH_2$

RN 25085-46-5 HCAPLUS
CN Acetic acid ethenyl ester, polymer with chloroethene and ethene
(9CI) (CA INDEX NAME)

CM 1

CRN 108-05-4 CMF C4 H6 O2

ACO-CH-CH2

CM 2

CRN 75-01-4 CMF C2 H3 C1

 $H_2C = CH - C1$

CM 3

CRN 74-85-1 CMF C2 H4

 $H_2C == CH_2$

RN 57546-92-6 HCAPLUS

CN Acetic acid ethenyl ester, polymer with chloroethene, ethene and N-(hydroxymethyl)-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 924-42-5 CMF C4 H7 N O2

 $\begin{matrix} \mathsf{O} \\ \parallel \\ \mathsf{HO-CH}_2\mathsf{-NH-C-CH} \end{matrix} \\ \mathbf{CH}_2 \\ \mathbf{CH}_2 \\ \mathbf{CH}_2 \\ \mathbf{CH}_2 \\ \mathbf{CH}_2 \\ \mathbf{CH}_3 \\ \mathbf{CH}_4 \\ \mathbf{CH}_5 \\ \mathbf{CH}_5 \\ \mathbf{CH}_5 \\ \mathbf{CH}_5 \\ \mathbf{CH}_6 \\ \mathbf{CH}_6 \\ \mathbf{CH}_6 \\ \mathbf{CH}_6 \\ \mathbf{CH}_7 \\ \mathbf{CH}_8 \\ \mathbf{CH$

CM 2

CRN 108-05-4 CMF C4 H6 O2

ACO-CH-CH2

CM 3

CRN 75-01-4 CMF C2 H3 C1

 $H_2C = CH - C1$

CM 4

CRN 74-85-1 CMF C2 H4

 $H_2C \longrightarrow CH_2$

IC C11D003-37

CC 46-6 (Surface Active Agents and Detergents)
 Section cross-reference(s): 38

IT Opacifiers

(vinyl polymer emulsions, for liquid detergents)

IT Detergents

(cleaning compns., liquid, opacifiers for, vinyl polymer emulsions as)

TT 75-01-4D, polymers with vinyl acetate and vinyl neoalkanoates 108-05-4D, polymers with vinyl neoalkanoates 24937-78-8 25085-46-5 57546-92-6

RL: USES (Uses)

(opacifiers, for liquid detergents)

```
=> d que stat 1135
L1 1 SEA FILE=HCAPLUS ABB=ON PLU=ON US20050113267/PN
                1 SEA FILE=REGISTRY ABB=ON PLU=ON 24937-78-8/RN
L<sub>3</sub>
           13973 SEA FILE=REGISTRY ABB=ON PLU=ON 108-05-4/CRN
13674 SEA FILE=REGISTRY ABB=ON PLU=ON 74-85-1/CRN
2018 SEA FILE=REGISTRY ABB=ON PLU=ON L4 AND L5
L4
L5
L6
                1 SEA FILE=REGISTRY ABB=ON PLU=ON 9011-14-7/RN
L7
L8
           71568 SEA FILE=REGISTRY ABB=ON PLU=ON 80-62-6/CRN
L9
                 1 SEA FILE=REGISTRY ABB=ON PLU=ON 9003-53-6/RN
           1 SEA FILE=REGISTRY ABB=ON PLU=ON 100-42-5/RN
71910 SEA FILE=REGISTRY ABB=ON PLU=ON 100-42-5/CRN
1 SEA FILE=REGISTRY ABB=ON PLU=ON 9004-57-3/RN
L10
L11
L12
             7489 SEA FILE=REGISTRY ABB=ON PLU=ON 64-17-5/CRN
L13
           452330 SEA FILE=HCAPLUS ABB=ON PLU=ON SURFACT? OR BIOSURFACT
L14
                   ? OR HYDROTROP? OR DETERG? OR ABSTERG? OR (SURFACE(W) AC
                   TIVE# OR WETTING# OR FOAMING#) (A) (AGENT? OR ADDITIVE?
                   OR COMPOUND? OR COMPD# OR CMPD#) OR EMULSIFIER? OR
                   DISPERSANT? OR SOAP? OR SHAMPOO?
L15
            3523 SEA FILE=HCAPLUS ABB=ON PLU=ON FABRIC (2A) SOFTEN?
L16
           38073 SEA FILE=HCAPLUS ABB=ON PLU=ON L3
           42394 SEA FILE=HCAPLUS ABB=ON PLU=ON L6
L17
          91090 SEA FILE=HCAPLUS ABB=ON PLU=ON L4
267816 SEA FILE=HCAPLUS ABB=ON PLU=ON L5
L18
L19
           46462 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND L19
L20
           453929 SEA FILE=HCAPLUS ABB=ON PLU=ON L14.OR L15
L21
                   QUE ABB=ON PLU=ON FRAGANC? OR PERFUM? OR PARFUM? OR
L25
                   COLOGNE? OR ODOR? OR AROMA? OR SMELL? OR SCENT? OR OLFA
                   CT? OR ESSENCE? OR BOUQUET?
             5463 SEA FILE=HCAPLUS ABB=ON PLU=ON L25(2A) (PLEAS? OR
L26
                   AGREEABL? OR NICE OR GOOD? OR BLISS? OR SWEET? OR
                   DULCET?)
L27
             6201 SEA FILE=HCAPLUS ABB=ON PLU=ON MALODOR? OR MALODOUR?
                   OR STINK? OR STENCH?
             5701 SEA FILE=HCAPLUS ABB=ON PLU=ON L25(2A) (FOUL? OR BAD
L28
                   OR OFFEN? OR NASTY OR UNPLEAS?)
L29
               43 SEA FILE=HCAPLUS ABB=ON PLU=ON L26 AND L16
              48 SEA FILE=HCAPLUS ABB=ON PLU=ON L26 AND L17
L30
              51 SEA FILE=HCAPLUS ABB=ON PLU=ON L26 AND L20
51 SEA FILE=HCAPLUS ABB=ON PLU=ON (L29 OR L30 OR L31)
1 SEA FILE=HCAPLUS ABB=ON PLU=ON L1 AND L16
L31
L32
L34
               1 SEA FILE=HCAPLUS ABB=ON PLU=ON L1 AND L17
L35
L36
               1 SEA FILE=HCAPLUS ABB=ON PLU=ON L1 AND L20
           1 SEA FILE=HCAPLUS ABB=ON PLU=ON (L34 OR L35 OR L36)
46462 SEA FILE=HCAPLUS ABB=ON PLU=ON L16 OR L17 OR L20
3258 SEA FILE=HCAPLUS ABB=ON PLU=ON L38 AND L21
L37
T-38
L39
               9 SEA FILE=HCAPLUS ABB=ON PLU=ON L39 AND L27
L43
L44
                3 SEA FILE=HCAPLUS ABB=ON PLU=ON L39 AND L28
              12 SEA FILE=HCAPLUS ABB=ON PLU=ON L43 OR L44
L45
L47
             3851 SEA FILE=HCAPLUS ABB=ON PLU=ON (AIR OR FABRIC) (2A) FRE
                   SH?
                 2 SEA FILE=HCAPLUS ABB=ON PLU=ON L14 AND L38 AND L47
L48
       1301314 SEA FILE=HCAPLUS ABB=ON PLU=ON SOLID? OR SEMISOLID?
L49
                   OR SEMI (A) SOLID?
           84341 SEA FILE=HCAPLUS ABB=ON PLU=ON SURFAC? (2A) TREAT?
3085 SEA FILE=HCAPLUS ABB=ON PLU=ON L49(L) L50
338 SEA FILE=HCAPLUS ABB=ON PLU=ON L51 AND L21
2 SEA FILE=HCAPLUS ABB=ON PLU=ON L52 AND (L27 OR L28)
1.50
L51
L52
L53
L55
                   OUE ABB=ON PLU=ON PARTICL? OR MICROPARTICL? OR PARTI
                   CULAT? OR DUST? OR GRIT? OR GRAIN# OR GRANUL? OR POWDER
                   ? OR SOOT? OR SMUT? OR FINES# OR PRILL? OR FLAKE# OR PE
                   LLET? OR BB#
           11659 SEA FILE=HCAPLUS ABB=ON PLU=ON L50(L)L55
1245 SEA FILE=HCAPLUS ABB=ON PLU=ON L57 AND L21
L57
L58
                1 SEA FILE=HCAPLUS ABB=ON PLU=ON L58 AND L37
L59
```

```
75091 SEA FILE=HCAPLUS ABB=ON PLU=ON L55(3A)(POLYM? OR HOMOPOLY? OR COPOLYM? OR (HOMO OR CO)(A)POLYM?)
L60
           9062 SEA FILE=HCAPLUS ABB=ON PLU=ON L60 AND L21
40991 SEA FILE=HCAPLUS ABB=ON PLU=ON L49(3A)(POLYM? OR
L61
1.62
                 HOMOPOLY? OR COPOLYM? OR (HOMO OR CO) (A) POLYM?)
           49706 SEA FILE=HCAPLUS ABB=ON PLU=ON L61 OR L62
1643 SEA FILE=HCAPLUS ABB=ON PLU=ON (V OR VOL OR VOLUM?)(2
L63
L64
                 A) (AVE OR AVERAG?) (2A) (DIA OR DIAM OR DIAMETER? OR
                 DIAMETRE? OR RADIUS OR RADII)
L65
              50 SEA FILE=HCAPLUS ABB=ON PLU=ON L64 AND L63
          728605 SEA FILE=HCAPLUS ABB=ON PLU=ON MICRON? OR MICROMET?
L66
                 OR MICRO(A) (METER? OR METRE?) OR M(A) (M OR METER?
                 OR METRE?)
              32 SEA FILE=HCAPLUS ABB=ON PLU=ON L65 AND L66
L67
               1 SEA FILE=HCAPLUS ABB=ON PLU=ON L67 AND L50
L68
          672822 SEA FILE=HCAPLUS ABB=ON PLU=ON MU#(A) (M OR METER? OR
L69
                 METRE?)
           32 SEA FILE=HCAPLUS ABB=ON PLU=ON L69 AND L65
10891 SEA FILE=HCAPLUS ABB=ON PLU=ON FREE(A) (V OR VOL OR
1.70
1.72
                 VOLUM?)
L75
               1 SEA FILE=HCAPLUS ABB=ON PLU=ON L72 AND L65
L76
             115 SEA FILE=HCAPLUS ABB=ON PLU=ON L32 OR L45 OR L48 OR
                 L53 OR L59 OR L65 OR L67 OR L68 OR L70 OR L75
          113354 SEA FILE=HCAPLUS ABB=ON PLU=ON DETERG?/SC,SX
10 SEA FILE=HCAPLUS ABB=ON PLU=ON L77 AND L76
L77
L78
               1 SEA FILE=HCAPLUS ABB=ON PLU=ON L1 AND L78
L79
             105 SEA FILE=HCAPLUS ABB=ON PLU=ON L76 NOT L78
L80
           36242 SEA FILE=HCAPLUS ABB=ON PLU=ON VISCOELAS? OR
L81
                 VISCO(A) ELAST?
              2 SEA FILE=HCAPLUS ABB=ON PLU=ON L76 AND L81
11 SEA FILE=HCAPLUS ABB=ON PLU=ON L78 OR L79 OR L83
L83
L84
          118668 SEA FILE=HCAPLUS ABB=ON PLU=ON SURFACTANT?/CT
L86
              10 SEA FILE=HCAPLUS ABB=ON PLU=ON L86 AND L80
L87
                 QUE ABB=ON PLU=ON INHIBIT? OR HINDER? OR IMPED? OR A
L88
                 RREST? OR REDUC? OR REDN# OR RESIST? OR SUPPRESS? OR RE
                 TARD? OR PROHIBIT? OR PREVENT? OR BLOCK? OR ELIMINAT? O
                 R LESS? OR ABAT? OR DEPRESS? OR DIMINISH? OR CURTAIL? O
                 R ABSEN? OR REMOV?
            3333 SEA FILE=HCAPLUS ABB=ON PLU=ON L88(3A)(L27 OR L28)
L89
              61 SEA FILE=HCAPLUS ABB=ON PLU=ON L89 AND L86 AND (L77
L90
                 OR L21)
              20 SEA FILE=HCAPLUS ABB=ON PLU=ON L90 AND AQUEOUS?
L91
              40 SEA FILE=HCAPLUS ABB=ON PLU=ON L91 OR L87 OR L84
L92
               9 SEA FILE=HCAPLUS ABB=ON PLU=ON L92 AND L38
L93
             67 SEA FILE=HCAPLUS ABB=ON PLU=ON L76 AND L38 6 SEA FILE=HCAPLUS ABB=ON PLU=ON L94 AND L77
T.94
L95
              40 SEA FILE=HCAPLUS ABB=ON PLU=ON L92 OR L93 OR L95
L96
              2 SEA FILE=HCAPLUS ABB=ON PLU=ON L15 AND L76
L97
L98
              40 SEA FILE=HCAPLUS ABB=ON PLU=ON L96 OR L97
          64132 SEA FILE=HCAPLUS ABB=ON PLU=ON L7
L99
L100
          143773 SEA FILE=HCAPLUS ABB=ON
                                            PLU=ON L8
              23 SEA FILE=HCAPLUS ABB=ON PLU=ON L76 AND (L99 OR L100)
L101
              1 SEA FILE=HCAPLUS ABB=ON PLU=ON L90 AND (L99 OR L100)
L102
              58 SEA FILE=HCAPLUS ABB=ON PLU=ON L98 OR L101 OR L102
L103
L104
         108479 SEA FILE=HCAPLUS ABB=ON
                                            PLU=ON L9
          61942 SEA FILE=HCAPLUS ABB=ON PLU=ON L10
L105
          280201 SEA FILE=HCAPLUS ABB=ON PLU=ON L11
L106
L107
         416802 SEA FILE=HCAPLUS ABB=ON PLU=ON (L104 OR L105 OR
                 L106) OR ?STYRENE
              49 SEA FILE=HCAPLUS ABB=ON PLU=ON L107 AND L76
L108
L109
              6 SEA FILE=HCAPLUS ABB=ON
                                            PLU=ON
                                                     L108 AND L77
              16 SEA FILE=HCAPLUS ABB=ON
                                            PLU=ON
                                                     L108 AND AQUEOUS?
L110
                                            PLU=ON L12
           10026 SEA FILE=HCAPLUS ABB=ON
L111
          32484 SEA FILE=HCAPLUS ABB=ON PLU=ON L13
L112
```

```
36584 SEA FILE=HCAPLUS ABB=ON PLU=ON ETHYL (A) CELLULOSE OR
L113
               ETHYLCELLULOSE OR L111 OR L112
L114
             3 SEA FILE=HCAPLUS ABB=ON PLU=ON L113 AND L76
            11 SEA FILE=HCAPLUS ABB=ON PLU=ON L113 AND L89
L115
          2590 SEA FILE=HCAPLUS ABB=ON PLU=ON L113 AND L21
L116
                                               L116 AND L89
             4 SEA FILE=HCAPLUS ABB=ON
                                        PLU=ON
L117
          2602 SEA FILE=HCAPLUS ABB=ON PLU=ON L113 AND (L21 OR L47)
L119
           480 SEA FILE=HCAPLUS ABB=ON PLU=ON L119 AND L77
L120
             1 SEA FILE=HCAPLUS ABB=ON PLU=ON L120 AND L52
L121
             3 SEA FILE=HCAPLUS ABB=ON PLU=ON L113 AND L52
L122
L123
            13 SEA FILE=HCAPLUS ABB=ON PLU=ON L113 AND L51
            85 SEA FILE=HCAPLUS ABB=ON PLU=ON L103 OR L109 OR L110
L124
               OR L114 OR L115 OR L117 OR (L121 OR L122 OR L123)
            21 SEA FILE=HCAPLUS ABB=ON PLU=ON L124 AND L77
L125
            64 SEA FILE=HCAPLUS ABB=ON PLU=ON L124 AND (L21 OR L52
L126
               OR L65)
L127
            64 SEA FILE=HCAPLUS ABB=ON PLU=ON L125 OR L126
            59 SEA FILE=HCAPLUS ABB=ON PLU=ON L127 AND (L21 OR L47)
L128
            10 SEA FILE=HCAPLUS ABB=ON PLU=ON L128 AND L38
L129
            49 SEA FILE=HCAPLUS ABB=ON PLU=ON L128 NOT L129
L130
            16 SEA FILE=HCAPLUS ABB=ON PLU=ON L130 AND (L99 OR
L131
               L100)
            22 SEA FILE=HCAPLUS ABB=ON PLU=ON L130 AND L107
L132
             4 SEA FILE=HCAPLUS ABB=ON PLU=ON L130 AND L113
L133
            39 SEA FILE=HCAPLUS ABB=ON PLU=ON L129 OR L131 OR L132
L134
               OR 1.133
            29 SEA FILE=HCAPLUS ABB=ON PLU=ON L134 NOT L129
L135
```

=> d 1135 1-29 ibib abs hitstr hitind

L135 ANSWER 1 OF 29 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:51049 HCAPLUS

TITLE: Manufacture of spherical ethylene-

(meth) acrylate ester copolymer

particles

INVENTOR(S): Sugihara, Norihiro; Funabiki, Yuhei; Maruo,

Junichi

PATENT ASSIGNEE(S): Sumitomo Seika Chemicals Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 20060164	14 A2	20060119	JP 2004-192503	
				2004
				0630
PRIORITY APPLN.	INFO.:		JP 2004-192503	
				2004
				0630

AB Ethylene-(meth)acrylate ester copolymers (A; with flexural modulus 5-120 MPa) 100, water 40-1500, ethylene oxide-propylene oxide copolymers with Mw 4000-30,000 3-30, and optionally nonionic surfactants 0.1-10 parts are heated at temperature equal to or higher than m.p. of A, melted, emulsified under stirring, and cooled to tamp. lower than the m.p. to give the spherical particles useful for cosmetics, printing inks, coatings, etc. Thus, ethylene-Me methacrylate copolymer was mixed with water and

```
Pluronic F 108 (ethylene oxide-propylene oxide triblock
     copolymer), emulsified as above, and cooled to give particle with
     volume-average diameter 13.1 \mu
     m and good spherical shape.
     25101-13-7, Ethylene-methyl methacrylate copolymer
TΤ
     RL: PEP (Physical, engineering or chemical process); PYP (Physical
     process); PROC (Process)
        (manufacture of spherical ethylene-(meth)acrylate ester
        copolymer particles by emulsification)
RN
     25101-13-7 HCAPLUS
     2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethene
CN
           (CA INDEX NAME)
     CM
     CRN 80-62-6
     CMF C5 H8 O2
 H<sub>2</sub>C O
      Ш
Me-C-C-OMe
     CM
          2
     CRN 74-85-1
     CMF C2 H4
H_2C = CH_2
     37-3 (Plastics Manufacture and Processing)
     spherical ethylene acrylate copolymer particle
     emulsification; nonionic surfactant emulsifier
     acrylic spherical particle; ethylene methyl methacrylate
     copolymer particle sphericity
IT
    Alcohols
    RL: NUU (Other use, unclassified); USES (Uses)
        (C12-13, ethoxylated, Noigen ET 167, nonionic
        surfactants; manufacture of spherical ethylene-
        (meth) acrylate ester copolymer particles by
        emulsification)
IT
     Polyoxyalkylenes
    RL: NUU (Other use, unclassified); USES (Uses)
        (alkyl group-terminated, nonionic surfactants; manufacture
        of spherical ethylene-(meth)acrylate ester copolymer
        particles by emulsification)
TΤ
    Polyoxyalkylenes
    RL: NUU (Other use, unclassified); USES (Uses)
        (block, triblock, emulsifiers; manufacture of spherical
        ethylene-(meth)acrylate ester copolymer
        particles by emulsification)
IT
    Emulsification
     Emulsifying agents
        (manufacture of spherical ethylene-(meth)acrylate ester
        copolymer particles by emulsification)
IT
    Polyoxyalkylenes
    RL: NUU (Other use, unclassified); USES (Uses)
        (manufacture of spherical ethylene-(meth)acrylate ester
        copolymer particles by emulsification)
IT
    Surfactants
        (nonionic; manufacture of spherical ethylene-(meth)acrylate ester
        copolymer particles by emulsification)
```

```
IT
     Particles
        (spherical; manufacture of spherical ethylene-(meth)acrylate ester
        copolymer particles by emulsification)
TΤ
     691397-13-4
     RL: NUU (Other use, unclassified); USES (Uses)
        (Pluronic F 108, Pluronic F 88, emulsifiers; manufacture of spherical ethylene-(meth)acrylate ester copolymer
        particles by emulsification)
IT
     9003-11-6, Ethylene oxide-propylene oxide copolymer
     RL: NUU (Other use, unclassified); USES (Uses)
        (emulsifiers; manufacture of spherical
        ethylene-(meth)acrylate ester copolymer
        particles by emulsification)
     9010-86-0, Ethyl acrylate-ethylene copolymer 25101-13-7,
TT
     Ethylene-methyl methacrylate copolymer 25103-74-6,
     Ethylene-methyl acrylate copolymer
     RL: PEP (Physical, engineering or chemical process); PYP (Physical
     process); PROC (Process)
        (manufacture of spherical ethylene-(meth)acrylate ester
        copolymer particles by emulsification)
     9004-98-2, Noigen ET 159 25322-68-3D, Polyethylene glycol, ether
IT
     with C12-13 alcs.
     RL: NUU (Other use, unclassified); USES (Uses)
        (nonionic surfactants; manufacture of spherical
        ethylene-(meth)acrylate ester copolymer
        particles by emulsification)
L135 ANSWER 2 OF 29 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         2006:31819 HCAPLUS
                         Method for treating wastewater containing
TITLE:
                         resin particles
INVENTOR (S):
                         Suzuki, Kazumitsu; Morisaki, Shoqo; Takahashi,
                         Kazuhiro
PATENT ASSIGNEE(S):
                         Sanyo Chemical Industries, Ltd., Japan
SOURCE:
                         Jpn. Kokai Tokkyo Koho, 21 pp.
                         CODEN: JKXXAF
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
     PATENT NO.
                        KIND DATE
                                          APPLICATION NO.
                                                                    DATE
     -----
                         ----
                                -----
                                            -----
                                20060112
     JP 2006007208
                         A2
                                            JP 2005-154639
                                                                    2005
                                                                    0526
PRIORITY APPLN. INFO.:
                                            JP 2004-155488
                                                                    2004
                                                                    0526
    The title wastewater, containing (A) resin particles having
AB
     volume average diameter 0.0005-500 .mu
     .m and (B) surfactants and/or (C) water-soluble
     polymers, is treated by adding inorg. coagulants, adding
     polyelectrolytes, and optionally adding organic flocculants. The
     process is especially suitable for treating high COD wastewater containing
     dispersed resin particles at low running cost.
    100-42-5D, Styrene, acrylic copolymers
     9010-92-8, Methacrylic acid-styrene
     copolymer
     RL: REM (Removal or disposal); PROC (Process)
        (particles, removal of; treating wastewater containing
        resin particles by coagulation and flocculation)
RN
     100-42-5 HCAPLUS
     Benzene, ethenyl- (9CI) (CA INDEX NAME)
CN
```

```
H2C= CH- Ph
RN
     9010-92-8 HCAPLUS
CN
     2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene (9CI)
     (CA INDEX NAME)
     CM
          1
     CRN 100-42-5
     CMF
         C8 H8
H_2C = CH - Ph
     CM
          2
     CRN 79-41-4
     CMF C4 H6 O2
   CH<sub>2</sub>
Me-C-CO2H
     60-2 (Waste Treatment and Disposal)
     Section cross-reference(s): 38, 46
ST
     resin particle surfactant removal wastewater coagulation
     flocculation
IT
     Surfactants
        (removal of; treating wastewater containing resin
        particles by coagulation and flocculation)
IT
     Sulfonic acids
     RL: REM (Removal or disposal); PROC (Process)
        (surfactants, removal of; treating
        wastewater containing resin particles by coagulation and
        flocculation)
IT
     100-42-5D, Styrene, acrylic copolymers
     9010-92-8, Methacrylic acid-styrene
     copolymer
     RL: REM (Removal or disposal); PROC (Process)
        (particles, removal of; treating wastewater containing
        resin particles by coagulation and flocculation)
L135 ANSWER 3 OF 29 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         2005:1027981 HCAPLUS
DOCUMENT NUMBER:
                         143:336217
TITLE:
                         Core-shell polyester-based toner particles
                         with fixing device and image-forming device
INVENTOR(S):
                         Nakayama, Shinya; Sasaki, Fumihiro; Mochizuki,
                         Satoshi; Kotsugai, Akihiro; Asahina, Yasuo;
                         Uchinokura, Osamu; Nakajima, Hisashi;
                         Matsuoka, Sonoh; Saito, Takuya; Ichikawa,
                         Tomoyuki; Sakata, Koichi
PATENT ASSIGNEE(S):
                         Japan
SOURCE:
                         U.S. Pat. Appl. Publ., 23 pp.
                         CODEN: USXXCO
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
```

```
PATENT NO.
                          KIND
                                 DATE
                                              APPLICATION NO.
                                                                      DATE
     -----
                          ----
                                 ------
                                              -----
     US 2005208411
                          A1
                                 20050922
                                             US 2005-81738
                                                                      2005
                                                                      0317
                                           EP 2005-6010
     EP 1580614
                          A2
                                 20050928
                                                                      2005
                                                                      0318
     EP 1580614
                                 20051109
                          A3
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU
                          A2
                                 20051027
                                             JP 2005-78806
     JP 2005301261
                                                                      2005
                                                                      0318
PRIORITY APPLN. INFO.:
                                             JP 2004-81162
                                                                  Α
                                                                      2004
                                                                      0319
AB
     An electrophotog, toner consists of particles with a core-shell
     structure consists of a binder resin, a dye (colorant), and a
     release agent, in which the toner satisfies the following
     relationships \Delta Tm = Tm1 - Tm2 > 10°C (Tm1 is the
     half-efflux temperature of the toner, Tm2 is the half-efflux temperature of a
     toner prepared by melting and kneading the toner particle). The
     content of the release agent near the surface of the toner
     particle is 7-30 volume*, based on the entire near-surface portion,
     when the content is determined by Fourier-transform IR
     spectroscopy-attenuated total reflection (FTIR-ATR) method. The
     core portion of the toner particle is a low-mol.-weight polyester
     (with maximum mol. weight 1000-30,000 and glass transition temperature
     40-70°), and the shell portion is a high-mol.-weight
     polyester, at a 5-30:100 core-shell weight ratio. The toner
     particle, which has a glass transition temperature 45-75°, has a
     volume average particle diameter, Dv, of
     3.0-8.0 .mu.m, and a 1.00-1.40:1 Dv/Dn (number
     average particle diameter) ratio. A fixing device and an image-forming
     device are also presented.
IΤ
     524034-11-5, Eleminol rs 30-methacrylic acid-
     styrene copolymer
     RL: PRP (Properties); TEM (Technical or engineered material use);
     USES (Uses)
        (toner component; core-shell polyester-based toner particles
        with fixing device and image-forming device)
     524034-11-5 HCAPLUS
PN
     2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene and
     \alpha-(2-methyl-1-oxo-2-propenyl)-\omega-(sulfooxy)poly(oxy-1,2-
     ethanediyl) sodium salt (9CI) (CA INDEX NAME)
     CM
          1
     CRN 120487-52-7
```

CMF (C2 H4 O)n C4 H6 O5 S . Na

CCI PMS

$$H_2^{C}$$
 O H_2^{C} $H_$

Na

CM 2

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CM 3

CRN 79-41-4 CMF C4 H6 O2

IT 25034-86-0P, Methyl methacrylate-styrene copolymer

RL: CPN (Combinatorial preparation); PRP (Properties); TEM (Technical or engineered material use); CMBI (Combinatorial study); PREP (Preparation); USES (Uses)

(toner particles containing; core-shell polyester-based toner particles with fixing device and image-forming device)

RN 25034-86-0 HCAPLUS

2-Propenoic acid, 2-methyl-, methyl ester, polymer with CN ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

2 CM

CRN 80-62-6 CMF C5 H8 O2

25034-86-0DP, Methyl methacrylate-styrene

```
copolymer, core-shell graft polymers with polyesters
     RL: SPN (Synthetic preparation); TEM (Technical or engineered
     material use); PREP (Preparation); USES (Uses)
        (toner particles containing; core-shell polyester-based
        toner particles with fixing device and image-forming device)
     25034-86-0 HCAPLUS
RN
     2-Propenoic acid, 2-methyl-, methyl ester, polymer with
CN
     ethenylbenzene (9CI) (CA INDEX NAME)
     CM
     CRN 100-42-5
     CMF C8 H8
H_2C = CH - Ph
          2
     CM
     CRN 80-62-6
     CMF C5 H8 O2
 H<sub>2</sub>C O
      Me-C-C-OMe
    ICM G03G009-093
INCL 430109400; 430111400; 430110200
     74-3 (Radiation Chemistry, Photochemistry, and Photographic and
     Other Reprographic Processes)
     Section cross-reference(s): 38, 47
IT
     113653-39-7, Eleminol MON 7
     RL: NUU (Other use, unclassified); USES (Uses)
        (dispersant; core-shell polyester-based toner
        particles with fixing device and image-forming device)
TΤ
     524034-11-5, Eleminol rs 30-methacrylic acid-
     styrene copolymer
    RL: PRP (Properties); TEM (Technical or engineered material use);
     USES (Uses)
        (toner component; core-shell polyester-based toner particles
        with fixing device and image-forming device)
     25034-86-0P, Methyl methacrylate-styrene
IT
     copolymer
    RL: CPN (Combinatorial preparation); PRP (Properties); TEM
     (Technical or engineered material use); CMBI (Combinatorial
     study); PREP (Preparation); USES (Uses)
        (toner particles containing; core-shell polyester-based
        toner particles with fixing device and image-forming device)
     25034-86-0DP, Methyl methacrylate-styrene
IT
    copolymer, core-shell graft polymers with polyesters
    RL: SPN (Synthetic preparation); TEM (Technical or engineered
    material use); PREP (Preparation); USES (Uses)
        (toner particles containing; core-shell polyester-based
        toner particles with fixing device and image-forming device)
L135 ANSWER 4 OF 29 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         2005:1004786 HCAPLUS
DOCUMENT NUMBER:
                         143:287173
TITLE:
                         Method for producing coagulated
                         particles from emulsion
                         polymerization latex
INVENTOR(S):
                         Ueda, Takashi
```

```
PATENT ASSIGNEE(S):
                           Kaneka Corporation, Japan
                           PCT Int. Appl., 40 pp.
SOURCE:
                           CODEN: PIXXD2
DOCUMENT TYPE:
                           Patent
                           Japanese
LANGUAGE:
FAMILY ACC. NUM. COUNT:
                           1
PATENT INFORMATION:
     PATENT NO.
                          KIND
                                               APPLICATION NO.
                                                                        DATE
                                DATE
     -----
     WO 2005085299
                           A1
                                  20050915
                                             WO 2004-JP19823
                                                                         2004
                                                                        1227
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ,
              CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG,
              ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,
             KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL,
              PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN,
              TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
             ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF,
              CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:
                                               JP 2004-63707
                                                                        2004
                                                                        0308
                                               JP 2004-232225
                                                                        2004
                                                                        0809
AΒ
     The method comprises (A) adjusting the temperature of the emulsion
     polymerization latex to the range of Tm \pm 15^{\circ}, wherein Tm
     represents a softening temperature of the polymer in the latex, (B)
     adding polyethylene oxide to the latex, (C) adding a coagulating
     agent so as to form a state wherein the phases of a polymer
     component and water are separated, (D) further adding a coagulating
     agent to thereby form a water suspension of coagulated
     polymer particles having a volume
     average particle diameter of 50-500 µ
     {\tt m}, and (E) adjusting the temperature of the suspension to be
     higher than Tm. The method provides coagulated particles being
     reduced in the amount of fine powders and having a low water
     content, and allows the operation for forming particles to be
     carried out at a temperature being near to a softening temperature of the
TΤ
     25852-37-3P, Butyl acrylate-methyl methacrylate
     copolymer 110254-02-9P, Allyl methacrylate-butyl
     acrylate-methyl methacrylate-styrene graft
     copolymer 142467-88-7P, Allyl methacrylate-butyl
     acrylate-2-ethylhexyl acrylate-methyl methacrylate graft
     RL: IMF (Industrial manufacture); PREP (Preparation)
        (production of coagulated particles with low water
        content from emulsion polymerization latexes)
     25852-37-3 HCAPLUS
ВN
     2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl
     2-propenoate (9CI) (CA INDEX NAME)
     CM
```

CRN 141-32-2 CMF C7 H12 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{n-BuO-C-CH-----} \text{CH}_2 \end{array}$$

CM 2

CRN 80-62-6 CMF C5 H8 O2

RN 110254-02-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, ethenylbenzene and 2-propenyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

CM 2

CRN 100-42-5 CMF C8 H8

$$H_2C = CH - Ph$$

CM 3

CRN 96-05-9 CMF C7 H10 O2

CM 4

CRN 80-62-6 CMF C5 H8 O2

$$^{\text{H}_2\text{C}}_{\parallel}$$
 0 $^{\parallel}$ $^{\parallel}$ Me- C- C- OMe

RN 142467-88-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, 2-ethylhexyl 2-propenoate and 2-propenyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

CM 2

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \text{CH}_2-\text{O}-\text{CH}-\text{CH}-\text{CH}_2\\ |\\ \text{Et}-\text{CH}-\text{Bu}-\text{n} \end{array}$$

CM 3

CRN 96-05-9 CMF C7 H10 O2

$$^{\text{H}_2\text{C}}_{\parallel}$$
 $^{\circ}_{\parallel}$ $^{\circ}_{\parallel}$ $^{\circ}_{\parallel}$ $^{\circ}_{\text{Me}}$ $^{\circ}_{\text{C}}$ $^{$

CM 4

CRN 80-62-6 CMF C5 H8 O2

$$^{\rm H_2C}_{\parallel}$$
 0 $^{\rm H_2C}_{\rm Me-C-C-OMe}$

IC ICM C08F006-22

ICS C08F265-04; C08F279-02

CC 37-3 (Plastics Manufacture and Processing)

Section cross-reference(s): 39

ST emulsion polymer latex coagulated particle; polyethylene oxide emulsion polymer latex coagulation

```
IT
     Surfactants
        (nonionic; production of coagulated particles with low water
        content from emulsion polymerization latexes)
IT
     9002-89-5, Polyvinyl alcohol
     RL: NUU (Other use, unclassified); USES (Uses)
        (GH 20M, surfactant; production of coagulated particles
        with low water content from emulsion polymerization latexes)
     25852-37-3P, Butyl acrylate-methyl methacrylate
TT
     copolymer 110254-02-9P, Allyl methacrylate-butyl
     acrylate-methyl methacrylate-styrene graft
     copolymer 142467-88-7P, Allyl methacrylate-butyl
     acrylate-2-ethylhexyl acrylate-methyl methacrylate graft
     copolymer
     RL: IMF (Industrial manufacture); PREP (Preparation)
        (production of coagulated particles with low water
        content from emulsion polymerization latexes)
REFERENCE COUNT:
                        8
                              THERE ARE 8 CITED REFERENCES AVAILABLE
                               FOR THIS RECORD. ALL CITATIONS AVAILABLE
                               IN THE RE FORMAT
L135 ANSWER 5 OF 29 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         2005:447098 HCAPLUS
DOCUMENT NUMBER:
                         142:483391
TITLE:
                         Sprayable melamine-formaldehyde rupturable
                         microcapsule slurries for long-lasting
                         fabric article freshening
INVENTOR(S):
                         Parekh, Prabodh P.; Fernandez, Guillermo H.;
                         Colt, Kristine K.
PATENT ASSIGNEE(S):
                         International Flavors & Fragrances Inc., USA
SOURCE:
                         Eur. Pat. Appl., 36 pp.
                         CODEN: EPXXDW
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
                        1
PATENT INFORMATION:
    PATENT NO.
                       KIND DATE
                                          APPLICATION NO.
                                                                 DATE
    EP 1533415
                       A1 20050525 EP 2004-257187
                                                                   2004
                                                                   1119
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
             MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ,
             EE, HU, PL, SK, HR, IS, YU
     US 2005113282
                         A1 20050526
                                           US 2003-718239
                                                                   2003
                                                                   1120
PRIORITY APPLN. INFO.:
                                           US 2003-718239
                                                                   2003
                                                                   1120
ΔR
    Described is a method for freshening fabric
    articles by means of spraying the articles with an aqueous
    slurry of microcapsules having rupturable melamine-formaldehyde
    polymeric walls, containing efficacious substances acting as malodor
    counteractants and/or fragrances. The slurry may optionally
    contain non-confined malodor counteractants and/or fragrances.
    The method is effective for the deposition of effectively-
    rupturable malodor suppressant and/or
```

Les Henderson Page 47 571-272-2538

fragrance emitting microcapsules onto fabrics where the resulting emitted fragrance activity and/or malodor counteractant activity

aesthetically pleasing and effective over a long period of time. Also described are efficacious malodor counteractant compns. useful for the described process and they comprise zinc

is long-lasting and the resulting substantive aroma is

```
ricinoleate and ≥1 of 1-cyclohexylethan-1-yl butyrate,
     1-cyclohexylethan-1-yl acetate, 1-cyclohexylethan-1-ol,
     1-(4'-methylethyl)cyclohexylethan-1-yl propionate, and/or
     2'-hydroxy-1'-ethyl(2-phenoxy)acetate. The efficacious
     microcapsule slurries useful for the described process comprise
     microcapsules with melamine-formaldehyde polymeric capsule walls
     with the microcapsules being in contact with ≥1 polymeric
     silicone phospholipids.
     9004-57-3, Ethyl cellulose
ΙT
     RL: TEM (Technical or engineered material use); USES (Uses)
        (suspension agent; method for lasting freshening of
        fabric articles by spraying polymeric silicone
        phospholipids containing slurry of rupturable microcapsules filled
        with fragrances or malodor suppressants)
     9004-57-3 HCAPLUS
RN
     Cellulose, ethyl ether (8CI, 9CI) (CA INDEX NAME)
CN
     CM
     CRN
         9004-34-6
     CMF
         Unspecified
     CCI PMS, MAN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     CM
         2
     CRN 64-17-5
     CMF C2 H6 O
H3C-CH2-OH
IC
    ICM D06M013-00
     ICS D06M023-12; C11D003-50; A61L009-01; A61L009-14; A61L009-04
     40-5 (Textiles and Fibers)
CC
    Section cross-reference(s): 46
    fragrance odor suppressant melamine formaldehyde microcapsule
ST
     slurry fabric freshener; lasting
     fabric freshener rupturable microcapsule
     silicone phospholipid slurry
TΤ
    Textiles
        (articles; method for lasting freshening of
        fabric articles by spraying polymeric silicone
       phospholipids containing slurry of rupturable microcapsules filled
        with fragrances or malodor suppressants)
TΤ
    Clays, uses
    RL: NUU (Other use, unclassified); USES (Uses)
        (attapulgitic; method for lasting freshening of
        fabric articles by spraying polymeric silicone
       phospholipids containing slurry of rupturable microcapsules filled
       with fragrances or malodor suppressants)
IT
    Deodorants
    Microcapsules
    Preservatives
    Slurries
        (method for lasting freshening of fabric
       articles by spraying polymeric silicone phospholipids containing
       slurry of rupturable microcapsules filled with fragrances or
       malodor suppressants)
TT
    Aminoplasts
    RL: PEP (Physical, engineering or chemical process); PYP (Physical
    process); TEM (Technical or engineered material use); PROC
     (Process); USES (Uses)
        (method for lasting freshening of fabric
```

articles by spraying polymeric silicone phospholipids containing slurry of rupturable microcapsules filled with fragrances or malodor suppressants) ΤТ Surfactants (nonionic; method for lasting freshening of fabric articles by spraying polymeric silicone phospholipids containing slurry of rupturable microcapsules filled with fragrances or malodor suppressants) Odor and Odorous substances IT (odor suppressants, encapsulated and non-encapsulated in a slurry; freshening of fabric articles by spraying polymeric silicone phospholipids containing slurry) Polysiloxanes, uses IT RL: COS (Cosmetic use); POF (Polymer in formulation); BIOL (Biological study); USES (Uses) (phospholipids; method for lasting freshening of fabric articles by spraying polymeric silicone phospholipids containing slurry of rupturable microcapsules filled with fragrances or malodor suppressants) 7631-86-9, Colloidal silica, uses TΤ RL: TEM (Technical or engineered material use); USES (Uses) (colloidal, suspension agent; method for lasting freshening of fabric articles by spraying polymeric silicone phospholipids containing slurry of rupturable microcapsules filled with fragrances or malodor suppressants) 9003-08-1, Melamine-formaldehyde copolymer RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses) (microcapsule enclosure; method for lasting freshening of fabric articles by spraying polymeric silicone phospholipids containing slurry of rupturable microcapsules filled with fragrances or malodor suppressants) 1193-81-3 1984-60-7 13040-19-2, Zinc ricinoleate 63449-88-7 851609-07-9 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (part of fragrance composition and malodor suppressant; method for lasting freshening of fabric articles by spraying polymeric silicone phospholipids containing slurry of rupturable microcapsules filled with fragrances or malodor suppressants) 4719-04-4, Hexahydro-1,3,5,-tris(2-hydroxyethyl)-s-triazine TT RL: TEM (Technical or engineered material use); USES (Uses) (preservative, Surcide P; method for lasting freshening of fabric articles by spraying polymeric silicone phospholipids containing slurry of rupturable microcapsules filled with fragrances or malodor suppressants) IT 57-55-6D, 1,2-Propylene glycol, C1-2 monoethers or diethers RL: TEM (Technical or engineered material use); USES (Uses) (slurry solvent, mono, di or tri; method for lasting freshening of fabric articles by spraying polymeric silicone phospholipids containing slurry of rupturable microcapsules filled with fragrances or malodor suppressants) IT 64-17-5, Ethanol, uses RL: TEM (Technical or engineered material use); USES (Uses) (slurry solvent; method for lasting freshening of fabric articles by spraying polymeric silicone phospholipids containing slurry of rupturable microcapsules filled with fragrances or malodor suppressants) 112-42-5D, 1-Undecanol, hydroxy-octaethoxy ethers 143-08-8D, TΤ 1-Nonanol, hydroxy-octaethoxy ethers 852035-33-7, Tomadol 91-8 RL: TEM (Technical or engineered material use); USES (Uses) (surfactant; method for lasting freshening of fabric articles by spraying polymeric silicone

:

phospholipids containing slurry of rupturable microcapsules filled with fragrances or malodor suppressants) IT 9004-57-3, Ethyl cellulose 9004-64-2, Hydroxypropyl cellulose 11138-66-2, Xanthan gum RL: TEM (Technical or engineered material use); USES (Uses) (suspension agent; method for lasting freshening of fabric articles by spraying polymeric silicone phospholipids containing slurry of rupturable microcapsules filled with fragrances or malodor suppressants) REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L135 ANSWER 6 OF 29 HCAPLUS COPYRIGHT 2006 ACS on STN 2005:155792 HCAPLUS ACCESSION NUMBER: DOCUMENT NUMBER: 142:241332 TITLE: High-hiding-power resin particles for various kinds of additives and manufacture thereof Takikawa, Tadao; Kano, Toshihiko; Yoshida, INVENTOR(S): Hiroshi PATENT ASSIGNEE(S): Sanyo Chemical Industries, Ltd., Japan Jpn. Kokai Tokkyo Koho, 42 pp. SOURCE: CODEN: JKXXAF DOCUMENT TYPE: Patent Japanese LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: APPLICATION NO. PATENT NO. KIND DATE DATE -----JP 2005048176 20050224 A2 JP 2004-207887 2004 0714 PRIORITY APPLN. INFO.: JP 2003-196821 2003 0714 AR Solvent-based dispersions containing resins and/or their precursors and fillers (e.g., oxides, carbonates, sulfates, urethane resins, silicones, azo pigments, etc.) are dispersed in aqueous media to form O/W emulsions and freed of the solvents to obtain resin particles satisfying shape coefficient (SF-2) 110-300 and volume-average diameter $0.1-300~\mu$ m and having filler-based shell layers of ≤1/2 the maximum inscribed circle radius. The particles are useful for (paper) coating additives, cosmetic additives, slash molding resins, powder coatings, or abrasives. Thus, adipic acid (I)-ethoxylated bisphenol A (II)-propoxylated bisphenol A (III)-terephthalic acid (IV)-trimellitic anhydride (V) copolymer, EtOAc, I-II-III-IV-V-IPDI prepolymer, isophorone diamine ketimine derivative, aqueous dispersant phase, and masterbatched C.I. Pigment Blue 15:3 were dispersed at 25°, evaporated to be freed of EtOAc, and dried at 35° to afford resin particles showing volume-average diam . 4.1 .mu.m, shell thickness 0.07 .mu .m, and SF-2 154. An acrylic coating containing the resin particles showed high hiding power. 521274-63-5P, Butyl acrylate-Eleminol RS 30-methacrylic acid-styrene graft copolymer 521293-05-0P, Butyl acrylate-ethylene oxide-methacrylic acid-styrene graft copolymer sulfate sodium salt RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(dispersing agents; manufacture of resin particles with high hiding

power, ink-holding property, and good polish performance)

RN 521274-63-5 HCAPLUS

2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenylbenzene and α -(2-methyl-1-oxo-2-propenyl)- ω -(sulfooxy)poly(oxy-1,2-ethanediyl) sodium salt, graft (9CI) (CA INDEX NAME)

CM 1

CN

CRN 120487-52-7

CMF (C2 H4 O)n C4 H6 O5 S . Na

CCI PMS

Na

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CM 4

CRN 79-41-4 CMF C4 H6 O2

$$\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me-C-CO}_2 \text{H} \end{array}$$

RN 521293-05-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenylbenzene and oxirane, hydrogen sulfate, graft, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 7664-93-9 CMF H2 O4 S

CM 2

CRN 521293-04-9

CMF (C8 H8 . C7 H12 O2 . C4 H6 O2 . C2 H4 O)x

CCI PMS

CM 3

CRN 141-32-2 CMF C7 H12 O2

CM 4

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CM 5

CRN 79-41-4 CMF C4 H6 O2

CM 6

CRN 75-21-8 CMF C2 H4 O



IT 9011-14-7, Sumipex BMHO
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
 (manufacture of resin particles with high hiding power, ink-holding property, and good polish performance)

```
RN
     9011-14-7 HCAPLUS
     2-Propenoic acid, 2-methyl-, methyl ester, homopolymer (9CI) (CA
CN
     INDEX NAME)
          1
     CM
     CRN 80-62-6
     CMF C5 H8 O2
 H<sub>2</sub>С о
Me-C-C-OMe
     ICM C08J003-12
     ICS C08J003-22; C08L101-00
CC
     37-6 (Plastics Manufacture and Processing)
     Section cross-reference(s): 38, 42
     521274-63-5P, Butyl acrylate-Eleminol RS 30-methacrylic
     acid-styrene graft copolymer 521293-05-0P,
     Butyl acrylate-ethylene oxide-methacrylic acid-styrene
     graft copolymer sulfate sodium salt
     RL: IMF (Industrial manufacture); MOA (Modifier or additive use);
     PREP (Preparation); USES (Uses)
        (dispersing agents; manufacture of resin particles with high hiding
        power, ink-holding property, and good polish performance)
     112618-79-8P, Adipic acid-ethoxylated bisphenol A-propoxylated
TT
     bisphenol A-terephthalic acid-trimellitic anhydride
     copolymer 634917-19-4P, Adipic acid-ethoxylated
bisphenol A-propoxylated bisphenol A-isophorone diamine-isophorone
     diisocyanate-terephthalic acid-trimellitic anhydride
     RL: IMF (Industrial manufacture); PEP (Physical, engineering or
     chemical process); PYP (Physical process); TEM (Technical or
     engineered material use); PREP (Preparation); PROC (Process); USES
     (Uses)
        (manufacture of resin particles with high hiding power,
        ink-holding property, and good polish performance)
     9011-14-7, Sumipex BMHO
     RL: PEP (Physical, engineering or chemical process); PYP (Physical
     process); TEM (Technical or engineered material use); PROC
     (Process); USES (Uses)
        (manufacture of resin particles with high hiding power, ink-holding
        property, and good polish performance)
L135 ANSWER 7 OF 29 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         2005:58270 HCAPLUS
DOCUMENT NUMBER:
                          142:136079
TITLE:
                         Resin particles containing fillers useful for
                          toners, cosmetics, and coatings
                          Takikawa, Tadao; Kinsho, Toshihiko; Noda,
INVENTOR (S):
                         Hidetoshi; Yahiro, Shuhei; Yoshida, Yutaka;
                          Ichikawa, Tomoyuki; Mochizuki, Satoshi;
                          Iwamoto, Yasuaki; Sugiura, Hideki
PATENT ASSIGNEE(S):
                          Sanyo Chemical Industries, Ltd., Japan; Ricoh
                         Company, Ltd. PCT Int. Appl., 76 pp.
SOURCE:
                          CODEN: PIXXD2
DOCUMENT TYPE:
                          Patent
LANGUAGE:
                          Japanese
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                DATE
     PATENT NO.
                                             APPLICATION NO.
                                                                     DATE
                         KIND
```

```
WO 2005005522
                                     20050120
                                                   WO 2004-JP10056
                              A1
                                                                              2004
                                                                              0714
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ,
               CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG,
              ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT,
               RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT,
               TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
          RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
              ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI,
               CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
      JP 2005049858
                              A2
                                     20050224
                                                   JP 2004-207825
                                                                              2004
                                                                              0714
PRIORITY APPLN. INFO.:
                                                   JP 2003-196755
                                                                              2003
                                                                              0714
     Title particles with volume average particle
AR
     diameter 0.1-300 .mu.m and shape factor
      (SF-2) 110-300 have a shell layer comprising at least part of the
     fillers, wherein the layer has a thickness ≥0.01 .
     mu.m and is up to a half of the radius of the
      maximum inscribed circle of the particle cross section. When used
     for toners, the resin particles have excellent blade cleanability and a wide fixing temperature range. When used as an additive for coating materials or cosmetic prepns., the particles have
      excellent hiding power. When used as an additive for paper
      coating, the particles have excellent ink retention. When used as
     an abrasive material, the particles have excellent abrasive
     properties. Thus, ethoxylated bisphenol A 218, propoxylated
     bisphenol A 537, terephthalic acid 213, and adipic acid 47 parts
     were polymerized at 230° for 5 h, 43 g trimellitic anhydride
     was added therein and reacted to give a polyester with Tg
      44°, weight average mol. weight 6500, and acid value 25, 291 parts of
     which was mixed with 30%-solids a wax dispersion comprising a polyester 150, carnauba wax 50, and Et acetate 470 parts 325, Et
     acetate 213, a polyester-polyurethane prepolymer (preparation given)
     119, a crosslinker solution comprising 50 parts isophorone diamine
     and 300 parts Me Et ketone 13, a master batch comprising a
     polyester, C.I. Pigment Blue 15:3, Solsperse 24000SC, and
     Solsperse 5000 39, and an aqueous solution comprising 30 parts
     Eleminol MON 7 and water 955 parts 1500 parts and dispersed to
     give a resin particle, 100 parts of the resulting particle was
     mixed with 1 parts hydrophilic silica, 5% of the resulting toner
     was mixed with 95% silicone-coated copper-zinc ferrite carrier and
     used as a developing agent, showing good blade cleanability and
     fixing temperature 135-210°.
     58111-07-2P, 2-Ethylhexyl acrylate-glycidyl
     methacrylate-methyl methacrylate-styrene copolymer
     521274-63-5P, Butyl acrylate-Eleminol RS 30-methacrylic
     acid-styrene graft copolymer 521293-05-0P
     RL: IMF (Industrial manufacture); POF (Polymer in formulation);
     TEM (Technical or engineered material use); PREP (Preparation);
     USES (Uses)
         (blend with polyester-polyoxyalkylene-polyurethane; preparation of
         resin particles containing fillers useful for toners, cosmetics,
         and coatings)
RN
     58111-07-2 HCAPLUS
```

2-Propenoic acid, 2-methyl-, methyl ester, polymer with

ethenylbenzene, 2-ethylhexyl 2-propenoate and oxiranylmethyl

CN

2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 106-91-2 CMF C7 H10 O3

$$\overset{\text{O}}{\overset{\text{CH}_2}{\overset{\text{CH}_2-\text{O-C-C-Me}}{}}}$$

CM 2

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{CH}_2-\text{O-C-CH} \Longrightarrow \text{CH}_2 \\ \parallel \\ \text{Et-CH-Bu-n} \end{array}$$

CM 3

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CM 4

CRN 80-62-6 CMF C5 H8 O2

521274-63-5 HCAPLUS RN

2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenylbenzene and α -(2-methyl-1-oxo-2-propenyl)- ω -(sulfooxy)poly(oxy-1,2-ethanediyl) sodium salt, graft (9CI) (CA INDEX NAME)

CM 1

CRN 120487-52-7 CMF (C2 H4 O) n C4 H6 O5 S . Na

CCI PMS

$$H_2C$$
 O H_2C O H_2C H_2

Na

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 100-42-5 CMF C8 H8

$$H_2C = CH - Ph$$

CM 4

CRN 79-41-4 CMF C4 H6 O2

RN 521293-05-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenylbenzene and oxirane, hydrogen sulfate, graft, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 7664-93-9 CMF H2 O4 S

CM 2

CRN 521293-04-9

CMF (C8 H8 . C7 H12 O2 . C4 H6 O2 . C2 H4 O) x

CCI PMS

CM 3

CRN 141-32-2 CMF C7 H12 O2

 $\overset{\circ}{\underset{\text{n-BuO-C-CH}}{\parallel}}\text{CH}_{2}$

CM 4

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CM 5

CRN 79-41-4 CMF C4 H6 O2

СH₂ || ме- С- СО₂н

CM 6

CRN 75-21-8 CMF C2 H4 O

 $^{\circ}$

IT 9011-14-7, Sumipex BMHO

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(preparation of resin particles containing fillers useful for toners, cosmetics, and coatings)

RN 9011-14-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 80-62-6 CMF C5 H8 O2

```
H<sub>2</sub>C 0
Me-C-C-OMe
     ICM C08J003-16
IC
     ICS C08F002-44; C08G085-00; G03G009-08
     38-3 (Plastics Fabrication and Uses)
CC
     Section cross-reference(s): 42, 62
     58111-07-2P, 2-Ethylhexyl acrylate-glycidyl
IT
     methacrylate-methyl methacrylate-styrene copolymer
     521274-63-5P, Butyl acrylate-Eleminol RS 30-methacrylic
     acid-styrene graft copolymer 521293-05-0P
     RL: IMF (Industrial manufacture); POF (Polymer in formulation);
     TEM (Technical or engineered material use); PREP (Preparation);
     USES (Uses)
        (blend with polyester-polyoxyalkylene-polyurethane; preparation of
        resin particles containing fillers useful for toners, cosmetics,
        and coatings)
TT
     634917-19-4P
     RL: IMF (Industrial manufacture); POF (Polymer in formulation);
     TEM (Technical or engineered material use); PREP (Preparation);
        (optionally blend with blend with acrylic polymer;
        preparation of resin particles containing fillers useful for
        toners, cosmetics, and coatings)
     9011-14-7, Sumipex BMHO
TT
     RL: POF (Polymer in formulation); TEM (Technical or engineered
     material use); USES (Uses)
        (preparation of resin particles containing fillers useful for toners,
        cosmetics, and coatings)
IT
     113653-39-7P, Eleminol MON 7
     RL: IMF (Industrial manufacture); PREP (Preparation)
        (surfactant; preparation of resin particles containing fillers
        useful for toners, cosmetics, and coatings)
REFERENCE COUNT:
                               THERE ARE 2 CITED REFERENCES AVAILABLE
                               FOR THIS RECORD. ALL CITATIONS AVAILABLE
                               IN THE RE FORMAT
L135 ANSWER 8 OF 29 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                        2004:928774 HCAPLUS
DOCUMENT NUMBER:
                         141:367202
TITLE:
                         Antistatic transparent rubber-modified resin
                         compositions and their moldings
Hiura, Masafumi; Yamada, Takeshi; Ooka,
INVENTOR (S):
                         Susumu; Ebe, Kazuyoshi
PATENT ASSIGNEE(S):
                         Denki Kagaku Kogyo Co., Ltd., Japan
                         Jpn. Kokai Tokkyo Koho, 17 pp.
SOURCE:
                         CODEN: JKXXAF
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
                                           APPLICATION NO.
    PATENT NO.
                         KIND
                                DATE
                                                                    DATE
    JP 2004307525
                         A2
                                20041104
                                            JP 2003-98511
                                                                    2003
                                                                    0401
PRIORITY APPLN. INFO.:
                                             JP 2003-98511
                                                                     2003
                                                                    0401
```

AB The compns. with good impact resistance and rigidity comprise (A)

transparent rubber-modified polymers prepared by polymerizing styrene monomers and (meth) acrylate esters in the presence of rubbers to satisfy dispersed rubber particle volumeaverage particle diameter (dv) 0.4-2.0 µ m and difference between d75 and d25 0.2-2.0 .mu .m (d75 and d25 are 75%-diameter and 25%-diameter in rubber particle diameter volume cumulative distribution curve, resp.) 82.8-94, (B) polyether-ester-amides prepared by copolymg. (B-1) C≥6 aminocarboxylic acids, lactams, or C≥6 diamine-dicarboxylic acid salts, (B-2) HR1mOC6H3XL-p-OR2nH, HR1mOC6H3XL-p-Y-C6H3XL-P-OR2nH, and/or HR1mOC10H6OR2nH (R1 = ethylene oxide; R2 = ethylene oxide, propylene oxide; Y = covalent bond of C1-6 alkylene, C1-6 alkylidene, C7-17 cycloalkylidene, C7-17 arylalkylidene, O, SO, SO2, CO, S, CF2 C(CF3)2, NH; X = H, C1-6 alkyl, halo, sulfone, its metal salt; L = 0-4; m, $n \ge 16$), and (B-3) C4-20 dicarboxylic acids 4-17, and (C) anionic surfactants and/or amine-free nonionic surfactants 0.2-3%. The moldings of the compns. have surface intrinsic resistivity 109-10 Ω , and their injection moldings for parts of pachinko (Japanese upright pinball game) bases are also claimed. Thus, styrene, Me methacrylate, and Bu acrylate were polymerized in the presence of Asaprene 670A (styrene-butadiene rubber) to give rubber particle-dispersed pellets, which were mixed with polyether-polyester-polyamide and surfactants and formed into moldings showing high light transmittance impact strength. 27136-15-8P, Butyl acrylate-methyl methacrylatestyrene copolymer RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (antistatic transparent rubber-modified resin compns. containing polyether-ester-amides and surfactants and their moldings) 27136-15-8 HCAPLUS 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate and ethenylbenzene (9CI) (CA INDEX NAME) CM CRN 141-32-2 CMF C7 H12 O2

IT

RN

CN

CM 2

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CM 3

CRN 80-62-6 CMF C5 H8 O2

```
H<sub>2</sub>C O
     C-OMe
Me-C-
IT
     106107-54-4
     RL: TEM (Technical or engineered material use); USES (Uses)
         (styrene-butadiene rubber, Asaprene 670A, dispersed
        particles; antistatic transparent rubber-modified resin compns.
        containing polyether-ester-amides and surfactants and
        their moldings)
     106107-54-4 HCAPLUS
RN
CN
     Benzene, ethenyl-, polymer with 1,3-butadiene, block (9CI)
     INDEX NAME)
     CM
          1
     CRN 106-99-0
     CMF C4 H6
H_2C = CH - CH = CH_2
          2
     CM
     CRN 100-42-5
     CMF C8 H8
H_2C = CH - Ph
TC
     ICM C08L051-04
     ICS C08K005-00; C08L077-12
CC
     38-3 (Plastics Fabrication and Uses)
     Section cross-reference(s): 39
ST
     styrene butadiene rubber particle dispersion
     polymer molding; polyether polyester polyamide rubber
     modified polymer molding; surfactant rubber modified.
     polymer molding antistatic
IT
     Sulfonic acids, uses
     RL: MOA (Modifier or additive use); TEM (Technical or engineered
     material use); USES (Uses)
  (alkanesulfonic, salts, C10-14, surfactants;
        antistatic transparent rubber-modified resin compns. containing
        polyether-ester-amides and surfactants and their
        moldings)
IT
     Surfactants
        (anionic; antistatic transparent rubber-modified resin compns.
        containing polyether-ester-amides and surfactants and
        their moldings)
ΙT
     Antistatic materials
     Impact-resistant materials
     Transparent materials
        (antistatic transparent rubber-modified resin compns. containing
        polyether-ester-amides and surfactants and their
        moldings)
IT
     Molded plastics, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (antistatic transparent rubber-modified resin compns. containing
        polyether-ester-amides and surfactants and their
        moldings)
     Styrene-butadiene rubber, uses
```

```
RL: TEM (Technical or engineered material use); USES (Uses)
        (block, Asaprene 670A, dispersed particles; antistatic
        transparent rubber-modified resin compns. containing
        polyether-ester-amides and surfactants and their
        moldings)
     Fatty acids, uses
IT
     RL: MOA (Modifier or additive use); TEM (Technical or engineered
     material use); USES (Uses)
        (glycerin esters, surfactants; antistatic transparent
        rubber-modified resin compns. containing polyether-ester-amides and
        surfactants and their moldings)
TΤ
     Surfactants
        (nonionic; antistatic transparent rubber-modified resin compns.
        containing polyether-ester-amides and surfactants and
        their moldings)
TΤ
     Polyoxyalkylenes, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (polyamide-polyester-; antistatic transparent rubber-modified
        resin compns. containing polyether-ester-amides and
        surfactants and their moldings)
TT
     Polyesters, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (polyamide-polyoxyalkylene-; antistatic transparent
        rubber-modified resin compns. containing polyether-ester-amides and
        surfactants and their moldings)
     Polyamides, uses
IT
     RL: TEM (Technical or engineered material use); USES (Uses)
        (polyester-polyoxyalkylene-; antistatic transparent
        rubber-modified resin compns. containing polyether-ester-amides and
        surfactants and their moldings)
TT
     27136-15-8P, Butyl acrylate-methyl methacrylate-
     styrene copolymer
     RL: IMF (Industrial manufacture); TEM (Technical or engineered
     material use); PREP (Preparation); USES (Uses)
        (antistatic transparent rubber-modified resin compns. containing
        polyether-ester-amides and surfactants and their
        moldings)
     106107-54-4
     RL: TEM (Technical or engineered material use); USES (Uses)
        (styrene-butadiene rubber, Asaprene 670A, dispersed
        particles; antistatic transparent rubber-modified resin compns.
        containing polyether-ester-amides and surfactants and
        their moldings)
IT
     56-81-5D, Glycerin, fatty acid esters
     RL: MOA (Modifier or additive use); TEM (Technical or engineered
     material use); USES (Uses)
        (surfactants; antistatic transparent rubber-modified
        resin compns. containing polyether-ester-amides and
        surfactants and their moldings)
L135 ANSWER 9 OF 29 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         2004:588112 HCAPLUS
DOCUMENT NUMBER:
                         141:114125
TITLE:
                         Thermal recording sheet containing leuco dye
                         and developer
INVENTOR(S):
                         Omura, Takahiro; Maenaka, Hiroshi; Toyokawa,
                         Takuva
PATENT ASSIGNEE(S):
                         Sekisui Chemical Co., Ltd., Japan
SOURCE:
                         Jpn. Kokai Tokkyo Koho, 10 pp.
                         CODEN: JKXXAF
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         Japanese
FAMILY ACC. NUM. COUNT:
                         1
PATENT INFORMATION:
```

Les Henderson Page 61 571-272-2538

APPLICATION NO.

DATE

PATENT NO.

KIND

DATE

```
-----
     JP 2004202770
                                 20040722
                                             JP 2002-372827
                         A2
                                                                       2002
                                                                       1224
PRIORITY APPLN. INFO.:
                                              JP 2002-372827
                                                                       2002
                                                                       1224
AB
     The sheet, showing high sensitivity and good dot reproduction,
     comprises a heat-sensitive layer containing the leuco dye and
     developer, an undercoat layer and/or a backing layer including a
     resin layer containing a hollow polymer particle
     with 1-30 .mu.m volume average
     diameter and hollowness ≥50 volume% to the total volume of
     it, and a support.
     9003-55-8, Styrene-butadiene copolymer
IT
     RL: TEM (Technical or engineered material use); USES (Uses) (binder, undercoat layer; thermal recording sheets with good
        sensitivity and dot reproduction containing hollow polymer
        particles in undercoat and/or backcoat layers)
     9003-55-8 HCAPLUS
RN
     Benzene, ethenyl-, polymer with 1,3-butadiene (9CI) (CA INDEX
CN
     NAME)
     CM
          1
     CRN 106-99-0
     CMF C4 H6
H_2C \longrightarrow CH \longrightarrow CH_2
     CM
          2
     CRN 100-42-5
     CMF C8 H8
H2C= CH- Ph
     52271-32-6P, Methyl methacrylate-trimethylolpropane
     triacrylate copolymer 108526-26-7P, Isobutyl
     methacrylate-methyl methacrylate-trimethylolpropane triacrylate
     copolymer
     RL: IMF (Industrial manufacture); TEM (Technical or engineered
     material use); PREP (Preparation); USES (Uses)
        (particle, undercoat layer; thermal recording sheets
        with good sensitivity and dot reproduction containing hollow
        polymer particles in undercoat and/or
        backcoat layers)
    52271-32-6 HCAPLUS
RN
     2-Propenoic acid, 2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-
CN
     propanediyl ester, polymer with methyl 2-methyl-2-propenoate (9CI)
       (CA INDEX NAME)
          1
     CM
     CRN 15625-89-5
     CMF C15 H20 O6
```

CRN 80-62-6 CMF C5 H8 O2

RN 108526-26-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate and 2-methylpropyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 15625-89-5 CMF C15 H20 O6

CM 2

CRN 97-86-9 CMF C8 H14 O2

CM 3

CRN 80-62-6 CMF C5 H8 O2

```
ICM B41M005-26
IC
     74-7 (Radiation Chemistry, Photochemistry, and Photographic and
     Other Reprographic Processes)
     Section cross-reference(s): 38
ST
     thermal recording sheet sensitivity hollow particle;
     polymer particle porosity undercoat printing
     sheet; printing dot reprodn leuco dye sheet
     Polymers, uses
TΤ
     RL: TEM (Technical or engineered material use); USES (Uses)
        (amphoteric, polymer particles treated
        with; thermal recording sheets with good sensitivity and dot
        reproduction containing hollow polymer particles in
        undercoat and/or backcoat layers)
ΙT
     Porous materials
        (particulate; thermal recording sheets with good sensitivity
        and dot reproduction containing hollow polymer
        particles in undercoat and/or backcoat layers)
ΙT
     Particles
        (porous; thermal recording sheets with good sensitivity and dot
        reproduction containing hollow polymer particles in
        undercoat and/or backcoat layers)
тт
     Thermal printing materials
        (sheets; thermal recording sheets with good sensitivity and dot
        reproduction containing hollow polymer particles in
        undercoat and/or backcoat layers)
ΙT
     9003-55-8, Styrene-butadiene copolymer
     RL: TEM (Technical or engineered material use); USES (Uses)
        (binder, undercoat layer; thermal recording sheets with good
        sensitivity and dot reproduction containing hollow polymer
        particles in undercoat and/or backcoat layers)
     80-05-7, Bisphenol A, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (developer, heat-sensitive layer; thermal recording sheets with
        good sensitivity and dot reproduction containing hollow polymer
        particles in undercoat and/or backcoat layers)
     9003-20-7D, Poly(vinyl acetate), partially saponified
     RL: TEM (Technical or engineered material use); USES (Uses)
        (dispersant, undercoat layer; thermal recording
        sheets with good sensitivity and dot reproduction containing hollow
        polymer particles in undercoat and/or
        backcoat layers)
IT
     89331-94-2, 3-Dibutylamino-6-methyl-7-anilinofluoran
     RL: TEM (Technical or engineered material use); USES (Uses)
        (dye, heat-sensitive layer; thermal recording sheets with good
        sensitivity and dot reproduction containing hollow polymer
        particles in undercoat and/or backcoat layers)
     52271-32-6P, Methyl methacrylate-trimethylolpropane
     triacrylate copolymer 108526-26-7P, Isobutyl
     methacrylate-methyl methacrylate-trimethylolpropane triacrylate
     copolymer
    RL: IMF (Industrial manufacture); TEM (Technical or engineered
     material use); PREP (Preparation); USES (Uses)
        (particle, undercoat layer; thermal recording sheets
        with good sensitivity and dot reproduction containing hollow
        polymer particles in undercoat and/or
        backcoat layers)
L135 ANSWER 10 OF 29 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                        2003:867943 HCAPLUS
DOCUMENT NUMBER:
                         139:354536
TITLE:
                        Absorbent article with an absorbent body with
                         improved odor performance
                         Lagerstedt-Eidrup, Marie-Louise; Lindstroem,
INVENTOR (S):
                        Aesa; Forsgren-Brusk, Ulla
                        SCA Hygiene Products AB, Swed.
PATENT ASSIGNEE(S):
```

Les Henderson Page 64 571-272-2538

SOURCE:

Eur. Pat. Appl., 18 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

DATE PATENT NO. KIND DATE APPLICATION NO. -----EP 1358894 A1 20031105 EP 2002-9937

2002 0503

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR EP 2002-9937

PRIORITY APPLN. INFO.:

2002 0503

AB Disclosed is an absorbent article such as a diaper, sanitary napkin, incontinence protector or the like, comprising an

absorbent body enclosed between a liquidimpermeable backing sheet and a liquid-permeable topsheet, characterized in that the absorbent body includes a water-absorbent, predominantly open-celled crosslinked acid-functional addition polymer foams comprising at least one odor control means that controls odor formation on contact with body fluids and is selected from the group consisting of (a) compds. containing anhydride groups, (b) compds. containing acid groups, (c) cyclodextrins, (d) biocides (e) surfactants having a HLB value of less than 11 (f) odor adsorbing agents such as zeolites, clay, activated carbon, silica, activated alumina (g) microorganisms which exhibit antagonistic properties against other unwanted microorganisms (h) pH-buffering systems (i) chelating agents. A polymer foam was prepared from acrylic acid, sodium acrylate solution, polyethylene glycol diacrylate, an aqueous solution of an addition product of ethylene oxide with a linear saturated C16C18 fatty alc., water, maleic anhydride, triethanolamine, and 2,2'-azobis(2-amidinopropane)dihydrochloride. When the foam thus prepared was exposed to urine, pH control prevents the release of malodorous compds.

IT 9011-13-6, Maleic anhydride-styrene copolymer RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

> (absorbent article with absorbent body containing polymer foams with odor control components)

9011-13-6 HCAPLUS RN

2,5-Furandione, polymer with ethenylbenzene (9CI) (CA INDEX NAME) CN

CRN 108-31-6 CMF C4 H2 O3

CRN 100-42-5 CMF C8 H8

```
H_2C = CH - Ph
```

IC ICM A61L015-42 ICS A61L015-46

CC 63-7 (Pharmaceuticals)

Section cross-reference(s): 37

IT Bacillus (bacterium genus)

Biocides

Chelating agents

Deodorants

Diapers

Lactic acid bacteria

Lactobacillus Lactococcus

Surfactants

(absorbent article with absorbent body containing polymer foams with odor control components)

50-21-5, Lactic acid, biological studies 50-81-7, Ascorbic acid, TT 65-85-0, Benzoic acid, biological studies biological studies 77-92-9, Citric 69-72-7, Salicylic acid, biological studies acid, biological studies 87-69-4, Tartaric acid, biological studies 108-31-6, Maleic anhydride, biological studies 110-44-1, Sorbic acid 123-03-5, Cetylpyridinium chloride 124-04-9, Adipic acid, biological studies 1338-43-8, Sorbitan monooleate 2170-03-8, Itaconic anhydride 3380-34-5, Triclosan 6915-15-7, Malic acid 7440-22-4D, Silver, salts 7585-39-9, β-Cyclodextrin 7631-86-9, Silica, biological studies 7646-85-7, Zinc chloride, biological studies 9003-01-4, Acrylic acid homopolymer 9011-13-6, Maleic anhydridestyrene copolymer 12619-70-4, Cyclodextrins 24937-72-2, Polymaleic anhydride 25300-97-4, Polyitaconic 25751-21-7, Acrylic acid-methacrylic acid copolymer 26426-80-2, Isobutene-maleic anhydride copolymer 29132-58-9, Acrylic acid-maleic acid copolymer 34229-21-5, Diisobutene-maleic anhydride copolymer RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(absorbent article with absorbent body containing polymer foams with odor control components)

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L135 ANSWER 11 OF 29 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2003:836565 HCAPLUS

DOCUMENT NUMBER:

139:309189

TITLE:

Composition for reducing

malodors and use in spray dispenser

INVENTOR(S): Triplett, Carl; He, Mengtao Pete; Pappalardo, Paul

USA

PATENT ASSIGNEE(S): SOURCE:

U.S. Pat. Appl. Publ., 10 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003199402	A1	20031023	US 2003-378845	2003
·WO 2003089020	A1	20031030	WO 2003-US12329	0304

```
2003
                                                                                 0422
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA,
               CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI,
               GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,
               KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,
               VC, VN, YU, ZA, ZM, ZW
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
               AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ,
               DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:
                                                     US 2002-374928P
                                                                                 2002
                                                                                 0422
                                                     US 2003-378845
                                                                                 2003
                                                                                 0304
     A composition for reducing malodors in the air and
AB
      on inanimate surfaces comprises a combination of ≥1 malodor
      neutralizing agent, ≥1 malodor binding agent, ≥1
     malodor masking agent, and ≥1 performance agent.
     composition includes a surfactant component, a
      water-dispersible polymer component, a metallic salt, a fragrance
     component, and a liquid carrier. A typical formulation contained Surfonic L 25-12 surfactant 3.34, Eastman AQ 55S polyester 0.50, TEGO Sorb 50 Conc 0.10, Fragrance A 1.00, EtOH
      7.00, preservative 0.24, citric acid 0.05%, and water the balance.
      9003-53-6D, Polystyrene, sulfonated, salt
     RL: TEM (Technical or engineered material use); USES (Uses)
          (in composition for reducing malodors in air and
         on fabric surfaces)
      9003-53-6 HCAPLUS
RN
     Benzene, ethenyl-, homopolymer (9CI) (CA INDEX NAME)
     CM
            1
     CRN
           100-42-5
     CMF C8 H8
H_2C = CH - Ph
     ICM C11D009-44
INCL 510101000
     46-6 (Surface Active Agents and Detergents)
CC
IT
     Alcohols, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
          (C12-15, ethoxylated; in composition for reducing
         malodors in air and on fabric surfaces)
IT
      Air fresheners
     Deodorants
         (composition for reducing malodors in air and on
         fabric surfaces)
TТ
     Perfumes
        Surfactants
         (in composition for reducing malodors in air and
         on fabric surfaces)
     Alcohols, uses
Essential oils
IT
```

Esters, uses

```
Fluoropolymers, uses
     Phenols, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (in composition for reducing malodors in air and
        on fabric surfaces)
     108-93-0, Cyclohexyl alcohol, uses 4468-02-4, Zinc gluconate 7585-39-9, \beta-Cyclodextrin 7646-85-7, Zinc chloride, uses 7733-02-0, Zinc sulfate 9002-89-5, Polyvinyl alcohol 9002-98-6
TΤ
     9003-39-8, Polyvinylpyrrolidone 9003-53-6D,
     Polystyrene, sulfonated, salt 10016-20-3,
     α-Cyclodextrin 13040-19-2, Zinc ricinoleate 16039-53-5,
     Zinc lactate 16283-36-6, Zinc salicylate 17465-86-0, \gamma-Cyclodextrin 18652-49-8 54590-72-6, AQ 55S
     RL: TEM (Technical or engineered material use); USES (Uses)
        (in composition for reducing malodors in air and
        on fabric surfaces)
L135 ANSWER 12 OF 29 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                          2003:706970 HCAPLUS
DOCUMENT NUMBER:
                          139:231404
TITLE:
                          Preparation of styrene-based (
                          co)polymer fine
                          particles having volume
                          average particle diameter in
                          desired range
INVENTOR(S):
                          Teramoto, Kenzo
PATENT ASSIGNEE(S):
                          Sekisui Plastics Co., Ltd., Japan
SOURCE:
                          Jpn. Kokai Tokkyo Koho, 5 pp.
                          CODEN: JKXXAF
DOCUMENT TYPE:
                          Patent
LANGUAGE:
                          Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
                                 DATE APPLICATION NO.
     PATENT NO.
                         KIND DATE
                                                                      DATE
                                              -----
                          ----
     JP 2003252913
                         A2
                                 20030910 JP 2002-57583
                                                                      2002
                                                                      0304
PRIORITY APPLN. INFO.:
                                              JP 2002-57583
                                                                      2002
                                                                       0304
AB
     Resin particles with volume average particle
     diameter (D) 1-3 .mu.m and coefficient of
     variation (CV) ≤25%, useful for spacers, optical diffusers,
     lubricants, matte agents for toners and coatings, functional
     supports, etc., are prepared by (i) preparation of a 1st suspension of
     monomers with D 3-20 .mu.m by addition of
    styrene-based monomers or their mixts. with other
     monomers, polymerization initiators soluble in the monomers or the mixts.,
     amphoteric surfactants, and inorg. dispersion
     stabilizers to aqueous media, followed with spraying the 1st
     suspension under pressure from a nozzle to prepare a 2nd suspension
     and its polymerization Thus, 90:10 (reaction ratio) styrene
     -divinylbenzene copolymer fine particles with
     D 2.2 .mu.m and CV 18.9% was prepared in the
     presence of azobis-N, N-dimethylvaleronitrile, Na lauryl sulfate,
     dimethylalkyllaurylbetaine, and Mg pyrophosphate.
IT
     9003-70-7P, Divinylbenzene-styrene copolymer
     9017-43-0P, Divinylbenzene-methyl methacrylate-
     styrene copolymer
     RL: IMF (Industrial manufacture); PREP (Preparation)
        (preparation of styrene-based (co)
```

polymer fine particles having volume

average particle diameter in desired range by suspension polymerization) 9003-70-7 HCAPLUS

RN

CNBenzene, diethenyl-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 1321-74-0 CMF C10 H10 CCI IDS

CM 2

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

9017-43-0 HCAPLUS RN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with diethenylbenzene and ethenylbenzene (9CI) (CA INDEX NAME)

CM

CRN 1321-74-0 C10 H10 CMF CCI IDS



CM 2

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CM 3 CRN 80-62-6 CMF C5 H8 O2

```
H<sub>2</sub>C 0
Me-C-C-OMe
     ICM C08F002-18
     ICS C08F012-00
CC
     37-3 (Plastics Manufacture and Processing)
     styrene polymer fine particle
     suspension polymn; particle diam control
     styrene polymer suspension polymn
IT
     Surfactants
        (amphoteric; preparation of styrene-based (co)
        polymer fine particles having volume
        average particle diameter in desired range by
        suspension polymerization)
     Fatty acids, uses
     RL: NUU (Other use, unclassified); USES (Uses)
        (coco, acyl-N-carboxymethyl-N-hydroxyethylethylenediamine
        sodium salt, amphoteric surfactant; preparation of
        styrene-based (co)polymer fine
        particles having volume average particle
        diameter in desired range by suspension polymerization)
IT
     Fatty acids, uses
     RL: NUU (Other use, unclassified); USES (Uses)
        (coco, amidopropyldimethylaminoacetic acid; preparation of
        styrene-based (co)polymer fine
        particles having volume average particle
        diameter in desired range by suspension polymerization)
ΙT
     Polymerization
        (suspension; preparation of styrene-based (co)
        polymer fine particles having volume
        average particle diameter in desired range by
        suspension polymerization)
IT
     107-43-7D, Betaine, dimethylalkyllauryl derivs. 36574-66-0D,
     3-Aminopropyldimethylaminoacetic acid betaine, coco fatty derivs.
     107647-97-2D, acyl-, N-coco fatty derivs.
     RL: NUU (Other use, unclassified); USES (Uses)
        (amphoteric surfactant; preparation of styrene
        -based (co)polymer fine particles
        having volume average particle diameter in
        desired range by suspension polymerization)
TT
     151-21-3, Sodium lauryl sulfate, uses
     RL: NUU (Other use, unclassified); USES (Uses)
        (anionic surfactant; preparation of styrene
        -based (co)polymer fine particles
        having volume average particle diameter in
        desired range by suspension polymerization)
     19262-94-3, Magnesium pyrophosphate
IT
     RL: NUU (Other use, unclassified); USES (Uses)
        (dispersion stabilizer; preparation of styrene-based (
        co)polymer fine particles having
        volume average particle diameter in desired
        range by suspension polymerization)
IT
     4419-11-8
     RL: CAT (Catalyst use); USES (Uses)
        (initiator; preparation of styrene-based (co)
        polymer fine particles having volume
        average particle diameter in desired range by
        suspension polymerization)
IT
     9003-70-7P, Divinylbenzene-styrene copolymer
```

9017-43-0P, Divinylbenzene-methyl methacrylatestyrene copolymer

RL: IMF (Industrial manufacture); PREP (Preparation) (preparation of styrene-based (co) polymer fine particles having volume average particle diameter in desired range by suspension polymerization)

L135 ANSWER 13 OF 29 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2003:481800 HCAPLUS

DOCUMENT NUMBER:

139:37998

TITLE:

Phthalocyanine dye-containing resin particles

and aqueous emulsions, inks, and

paints therefrom

INVENTOR(S):

Hoshino, Toyomasa; Morita, Makoto; Nemoto, Akifumi; Murata, Yukichi; Ishida, Yoshinori

PATENT ASSIGNEE(S):

Mitsubishi Chemical Corp., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 18 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003176310	A2	20030624	JP 2001-379698	
				2001
				1213
PRIORITY APPLN. INFO.:			JP 2001-379698	
				2001
				1213

OTHER SOURCE(S):

MARPAT 139:37998

GI

AB The resin particles are products prepared by emulsion polymerization of ethylenic monomers in aqueous media in the presence of surfactants, water-soluble polymerization initiators, and I [X1-X16

Ι

= H, NO2, OH, SH, CO2H (salt), SO3H (salt), CN, SCN, halo, , (un) substituted alkyl(oxy), cycloalkyl(oxy), alkenyl(oxy), aryl(oxy), heterocyclic (oxy), amino, acyl(oxy),
alkylsulfonyl(oxy), arylsulfonyl(oxy), alkoxycarbonyl(oxy), cycloalkyloxycarbonyl, alkenyloxycarbonyl, aryloxycarbonyl(oxy), heterocyclic oxycarbonyl, carbamoyl, sulfamoyl, alkylthio, cycloalkylthio, arylthio, heterocyclic thio, alkoxysulfonyl, cycloalkyloxysulfonyl, alkenyloxysulfonyl, aryloxysulfonyl, heterocyclic oxysulfonyl; X1 and X2, X2 and X3, X3 and X4, X5 and X6, X6 and X7, X7 and X8, X9 and X10, X10 and X11, X11 and X12, X13 and X14, X14 and X15, and X15 and X16 may form ring; M = H2, Fe, Co, Ni, Cu, Zn, Ru, Rh, Pd, Pt, AlY, SiY2, GeY2, SnY2; Y = halo, OH, alkoxy, trialkylsilyloxy] and satisfy I content \geq 0.1%. The particles may satisfy DV 5-20 nm and 1 \leq DV/DN \leq 1.5 (DV, DN = volume- and number-average diameter, resp.). Thus, styrene, Bu acrylate, acrylic acid were subjected to emulsion polymerization in the presence of a phthalocyanine dye to give a polymer particle dispersion with DV/DN 1.2. A jet ink from the dispersion was printed on paper, showing good color and high water and wear resistance.

IT 25586-20-3P, Acrylic acid-butyl acrylate-styrene
copolymer

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(particles; phthalocyanine dye-containing resin particles with narrow mol. weight distribution for aqueous emulsion inks and paints)

RN 25586-20-3 HCAPLUS

2-Propenoic acid, polymer with butyl 2-propenoate and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CN

CRN 141-32-2 CMF C7 H12 O2

CM 2

CRN 100-42-5 CMF C8 H8

H2C=CH-Ph

CM 3

CRN 79-10-7 CMF C3 H4 O2

IC ICM C08F002-44

```
ICS C08F002-22; C09B067-08; C09B067-46; C09D007-12; C09D011-00;
          C09D201-00; C09J011-08
     42-6 (Coatings, Inks, and Related Products)
CC
     phthalocyanine dye acrylic particle emulsion aq ink
ST
     coating; narrow mol wt distribution phthalocyanine dye acrylic
     particle
TТ
     Paints
        (aqueous emulsions; phthalocyanine dye-containing resin
        particles with narrow mol. weight distribution for aqueous
        emulsion inks and paints)
IT
        (jet-printing; phthalocyanine dye-containing resin particles with
        narrow mol. weight distribution for aqueous emulsion inks
        and paints)
     Cyanine dyes
IT
        (phthalocyanine; phthalocyanine dye-containing resin particles with
        narrow mol. weight distribution for aqueous emulsion inks
        and paints)
TT
     Inks
        (water-thinned, emulsion; phthalocyanine dye-containing resin
        particles with narrow mol. weight distribution for aqueous
        emulsion inks and paints)
     25586-20-3P, Acrylic acid-butyl acrylate-styrene
     copolymer
     RL: IMF (Industrial manufacture); TEM (Technical or engineered
     material use); PREP (Preparation); USES (Uses)
        (particles; phthalocyanine dye-containing resin particles
        with narrow mol. weight distribution for aqueous emulsion
        inks and paints)
     574-93-6D, Phthalocyanine, derivs. 50794-53-1
TΤ
     RL: TEM (Technical or engineered material use); USES (Uses)
        (phthalocyanine dye-containing resin particles with narrow mol. weight
        distribution for aqueous emulsion inks and paints)
L135 ANSWER 14 OF 29 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:479002 HCAPLUS
DOCUMENT NUMBER:
                         139:54327
TITLE:
                        Azo dye-containing resin particles and
                         aqueous emulsions, inks, and paints
                         therefrom
                        Hoshino, Toyomasa; Morita, Makoto; Nemoto,
Akifumi; Murata, Yukichi; Ishida, Yoshinori
INVENTOR(S):
PATENT ASSIGNEE(S):
                        Mitsubishi Chemical Corp., Japan
                         Jpn. Kokai Tokkyo Koho, 20 pp.
SOURCE:
                         CODEN: JKXXAF
                         Patent
DOCUMENT TYPE:
                         Japanese
LANGUAGE:
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
                                          APPLICATION NO.
     PATENT NO.
                        KIND DATE
                                                                   DATE
                                            -----
     JP 2003176309
                        A2
                                20030624
                                            JP 2001-376678
                                                                   2001
                                                                   1211
PRIORITY APPLN. INFO.:
                                            JP 2001-376678
                                                                   2001
```

OTHER SOURCE(S):

MARPAT 139:54327

GΙ

1211

The resin particles are products prepared by emulsion polymerization of AB ethylenic monomers in aqueous media in the presence of surfactants, water-soluble polymerization initiators, and azo dyes (D1N:NE1) mL(D2N:NE2) n (D1, D2 = residual group of diazo component D2NH2 and D2NH2; E1, E2 = residual group of coupling component E1H and E2H; L = linking group; m, n = 0-4; $1 \le m + n \le$ 4) and satisfy the dye content $\geq 0.1\%$. The particles may satisfy DV 5-20 nm and 1 \leq DV/DN ≤ 1.5 (DV, DN = volume- and number-average diameter, resp.). Thus, styrene, Bu acrylate, acrylic acid were subjected to emulsion polymerization in the presence of I to give a polymer particle dispersion with DV/DN 1.4. A jet ink from the dispersion was printed on paper, showing good color and high water and wear resistance. 25586-20-3P, Acrylic acid-butyl acrylate-styrene IT

copolymer

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(particles; azo dye-containing resin particles with narrow mol. weight distribution for aqueous emulsion inks and paints)

25586-20-3 HCAPLUS RN

2-Propenoic acid, polymer with butyl 2-propenoate and ethenylbenzene (9CI) (CA INDEX NAME)

CRN 141-32-2 CMF C7 H12 O2

CM 2

CRN 100-42-5 C8 H8 CMF

H2C== CH-Ph

CM 3

CRN 79-10-7 CMF C3 H4 O2

```
0
HO-C-CH=CH2
     ICM C08F002-44
IC
     ICS C08F002-22; C08K005-23; C08L101-00
42-6 (Coatings, Inks, and Related Products)
CC
     azo dye acrylic particle emulsion aq ink coating; narrow
     mol wt distribution azo dye acrylic particle
TΥ
        (aqueous emulsions; azo dye-containing resin particles with
        narrow mol. weight distribution for aqueous emulsion inks
        and paints)
TT
        (azo dye-containing resin particles with narrow mol. weight
        distribution for aqueous emulsion inks and paints)
IT
        (jet-printing; azo dye-containing resin particles with narrow mol.
        weight distribution for aqueous emulsion inks and paints)
IT
        (water-thinned, emulsion; azo dye-containing resin particles with
        narrow mol. weight distribution for aqueous emulsion inks
        and paints)
TΤ
     6706-82-7
     RL: MOA (Modifier or additive use); TEM (Technical or engineered
     material use); USES (Uses)
        (azo dye-containing resin particles with narrow mol. weight
        distribution for aqueous emulsion inks and paints)
     25586-20-3P, Acrylic acid-butyl acrylate-styrene
TT
     copolymer
     RL: IMF (Industrial manufacture); TEM (Technical or engineered
     material use); PREP (Preparation); USES (Uses)
        (particles; azo dye-containing resin particles with narrow mol. weight distribution for aqueous emulsion inks
        and paints)
L135 ANSWER 15 OF 29 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         2003:479001 HCAPLUS
DOCUMENT NUMBER:
                         139:54326
TITLE:
                         Quinophthalone dye-containing resin particles
                         and aqueous emulsions, inks, and
                         paints therefrom
INVENTOR(S):
                         Hoshino, Toyomasa; Morita, Makoto; Nemoto,
                         Akifumi; Murata, Yukichi; Ishida, Yoshinori
PATENT ASSIGNEE(S):
                         Mitsubishi Chemical Corp., Japan
                         Jpn. Kokai Tokkyo Koho, 17 pp.
SOURCE:
                         CODEN: JKXXAF
DOCUMENT TYPE:
                         Patent
                         Japanese
LANGUAGE:
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
     PATENT NO.
                         KIND
                               DATE
                                           APPLICATION NO.
                                                                     DATE
                                -----
                                             -----
                         ----
     JP 2003176308
                          A2
                                 20030624
                                             JP 2001-376677
                                                                     2001
                                                                     1211
PRIORITY APPLN. INFO.:
                                             JP 2001-376677
                                                                     2001
                                                                     1211
```

OTHER SOURCE(S): MARPAT 139:54326

GI

$$x^3$$
 x^2
 x^4
 x^5
 x^6
 x^7
 x^8

The resin particles are products prepared by emulsion polymerization of AB ethylenic monomers in aqueous media in the presence of surfactants, water-soluble polymerization initiators, and I [X1-X10
= H, NO2, OH, SH, CO2H, CN, SCN, halo, , (un)substituted alkyl(oxy), cycloalkyl(oxy), alkenyl(oxy), aryl(oxy), heterocyclic
(oxy), amino, acyl(oxy), alkylsulfonyl(oxy), arylsulfonyl(oxy), alkoxycarbonyl(oxy), cycloalkyloxycarbonyl, alkenyloxycarbonyl, aryloxycarbonyl(oxy), heterocyclic oxycarbonyl, carbamoyl, sulfamoyl, alkylthio, cycloalkylthio, arylthio, heterocyclic thio, alkoxysulfonyl, cycloalkyloxysulfonyl, alkenyloxysulfonyl, aryloxysulfonyl, heterocyclic oxysulfonyl; X7 and X8, X8 and X9, and X9 and X10 may form ring] and satisfy I content ≥0.1%. The particles may satisfy DV 5-20 nm and 1 ≤ DV/DN ≤1.5 (DV, DN = volume- and number-average diameter, resp.). Thus, styrene, Bu acrylate, acrylic acid were subjected to emulsion polymerization in the presence of I [X1 = OH; X2-X8, X10 = H; X9 = CON(n-C8H17)2] to give a polymer particle dispersion with DV/DN 1.3. A jet ink from the dispersion was printed on paper, showing good color and high water and wear resistance. TT 25586-20-3P, Acrylic acid-butyl acrylate-styrene copolymer RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

Ι

(particles; quinophthalone dye-containing resin particles with narrow mol. weight distribution for aqueous emulsion inks and paints)

RN 25586-20-3 HCAPLUS

2-Propenoic acid, polymer with butyl 2-propenoate and CN ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

CM 2

CRN 100-42-5 CMF C8 H8

H2C== CH-Ph

3

```
CRN 79-10-7
     CMF C3 H4 O2
HO- C- CH= CH2
     ICM C08F002-44
IC
     ICS C08K005-3432; C08L101-00
CC
     42-6 (Coatings, Inks, and Related Products)
     quinophthalone dye acrylic particle emulsion aq ink
ST
     coating; narrow mol wt distribution quinophthalone dye acrylic
     particle
     Paints
IT
        (aqueous emulsions; quinophthalone dye-containing resin
        particles with narrow mol. weight distribution for aqueous
        emulsion inks and paints)
IT
        (jet-printing; quinophthalone dye-containing resin particles with
        narrow mol. weight distribution for aqueous emulsion inks
        and paints)
IT
     Dyes
        (quinophthalone; quinophthalone dye-containing resin particles with
        narrow mol. weight distribution for aqueous emulsion inks
        and paints)
IT
     Inks
        (water-thinned, emulsion; quinophthalone dye-containing resin
        particles with narrow mol. weight distribution for aqueous
        emulsion inks and paints)
     25586-20-3P, Acrylic acid-butyl acrylate-styrene
TΤ
     copolymer
     RL: IMF (Industrial manufacture); TEM (Technical or engineered
     material use); PREP (Preparation); USES (Uses)
        (particles; quinophthalone dye-containing resin particles
        with narrow mol. weight distribution for aqueous emulsion
        inks and paints)
     83-08-9D, Quinophthalone, derivs. 333382-61-9
     RL: TEM (Technical or engineered material use); USES (Uses)
        (quinophthalone dye-containing resin particles with narrow mol. weight
        distribution for aqueous emulsion inks and paints)
L135 ANSWER 16 OF 29 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         2003:349505 HCAPLUS
DOCUMENT NUMBER:
                         138:346543
TITLE:
                         Jet printing ink containing dye and pigment,
                         jet printing ink cartridge, jet-printing method, and ink-jet printed image
                         Asatake, Atsushi; Nakamura, Masaki; Kawashima,
INVENTOR(S):
                         Yasuhiko
                         Konica Co., Japan
Jpn. Kokai Tokkyo Koho, 21 pp.
PATENT ASSIGNEE(S):
SOURCE:
                         CODEN: JKXXAF
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         Japanese
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                    DATE
                                            -----
                                -----
```

JP 2003128968 A2 20030508 JP 2001-327590 2001 1025 PRIORITY APPLN. INFO.: JP 2001-327590 2001 1025

AB The ink contains (a) pigment particles coated with a water-insol. and water-dispersible polymer layers and (b) ≥1 colored fine particles selected from dye-containing resin particles, the particles further coated with dyes, and the dye-coated particle overcoated with a resin. The ink is characterized by that a redispersion coefficient, i.e., (secondary volume average particle diameter of the colored particles and the pigment after redispersion)/(the secondary volume average particle diameter before redispersion), is 0.5-5. The ink particle diameter before redispersion), is 0.5-5. The ink cartridge involves ≥1 container for the above ink. The ink is used for jet printing to give a Ag halide photog. image-like image with good granularity, gloss, and light resistance. IT 35209-54-2

RL: MOA (Modifier or additive use); USES (Uses) (in jet printing ink containing dye-containing polymer particles and pigment giving image with granularity, gloss, and light resistance)

35209-54-2 HCAPLUS 2-Propenoic acid, polymer with ethenylbenzene, ammonium salt (9CI) CN (CA INDEX NAME)

CM 1

CRN 25085-34-1 CMF (C8 H8 . C3 H4 O2)x CCI PMS

> CM 2

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CM 3

CRN 79-10-7 CMF C3 H4 O2

IΤ 26355-47-5, 2-Hydroxyethyl methacrylate-methacrylic acidstyrene copolymer 518020-17-2, Acrylic acid-butyl acrylate-2-hydroxyethyl methacrylate-sodium styrenesulfonate-styrene copolymer RL: TEM (Technical or engineered material use); USES (Uses) (jet printing ink containing dye-containing polymer particles and pigment particles containing) RN 26355-47-5 HCAPLUS

2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene and 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CRN 868-77-9 CMF C6 H10 O3

$$^{\rm H_2C}_{\parallel}$$
 0 $^{\rm Me-C-C-C-O-CH_2-CH_2-OH}_{\parallel}$

CM 2

CRN 100-42-5 CMF C8 H8

$$H_2C = CH - Ph$$

CM 3

CRN 79-41-4 CMF C4 H6 O2

$$\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me-C-CO}_2 \text{H} \end{array}$$

RN 518020-17-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with butyl 2-propenoate, ethenylbenzene, 2-propenoic acid and sodium ethenylbenzenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 27457-28-9 CMF C8 H8 O3 S . Na CCI IDS



 $D1-CH=CH_2$

 $D1-SO_3H$

Na

CM 2

CRN 868-77-9

CMF C6 H10 O3

CM 3

CRN 141-32-2 CMF C7 H12 O2

CM 4

CRN 100-42-5 CMF C8 H8

$$H_2C = CH - Ph$$

CM 5

CRN 79-10-7 CMF C3 H4 O2

IT 100-42-5D, Styrene, polymer with silicone
macromonomer and acrylic monomer 9011-14-7, Poly(methyl
methacrylate)

methacrylate)
RL: TEM (Technical or engineered material use); USES (Uses)
(particle core; jet printing ink containing dye-containing
polymer particles and pigment giving image
with granularity, gloss, and light resistance)

RN 100-42-5 HCAPLUS

CN Benzene, ethenyl- (9CI) (CA INDEX NAME)

RN 9011-14-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, homopolymer (9CI) (CA
INDEX NAME)

CM 1

CRN 80-62-6 CMF C5 H8 O2

$$^{\mathrm{H_2C}}_{\parallel}$$
 $^{\mathrm{O}}_{\parallel}$ $^{\mathrm{Me-C-C-OMe}}$

IT 26010-51-5, 2-Hydroxyethyl methacrylate-styrene
copolymer 28134-84-1, 2-Ethylhexyl
acrylate-2-hydroxyethyl methacrylate-styrene
copolymer 40704-95-8, 2-Ethylhexyl
acrylate-2-hydroxyethyl methacrylate-methyl methacrylate
copolymer
RL: TEM (Technical or engineered material use); USES (Uses)
 (particle shell; jet printing ink containing dye-containing
 polymer particles and pigment giving image
 with granularity, gloss, and light resistance)
RN 26010-51-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with
ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 868-77-9 CMF C6 H10 O3

CM 2

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

RN 28134-84-1 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with ethenylbenzene and 2-ethylhexyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 868-77-9 CMF C6 H10 O3

$$^{\rm H_2C}_{\parallel}$$
 $^{\rm O}_{\parallel}$ $^{\rm Me-C-C-O-CH_2-CH_2-OH}_{\parallel}$

CM 2

CRN 103-11-7 CMF C11 H20 O2

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

RN 40704-95-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with 2-ethylhexyl 2-propenoate and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 868-77-9 CMF C6 H10 O3

CM 2

CRN 103-11-7 CMF C11 H20 O2

CM 3

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{ccc} ^{H_2C} & \text{O} \\ & \parallel & \parallel \\ \text{Me-} & \text{C-} & \text{C-} & \text{OMe} \end{array}$$

IT 9003-55-8

RL: MOA (Modifier or additive use); USES (Uses)
(styrene-butadiene rubber, Nipol SX 1105; in jet
printing ink containing dye-containing polymer
particles and pigment giving image with granularity,
gloss, and light resistance)

```
RN
     9003-55-8 HCAPLUS
CN
     Benzene, ethenyl-, polymer with 1,3-butadiene (9CI) (CA INDEX
     NAME)
          1
     CM
     CRN
         106-99-0
     CMF C4 H6
H_2C = CH - CH = CH_2
     CM
          2
     CRN 100-42-5
     CMF C8 H8
H2C= CH- Ph
     ICM C09D011-00
IC
     ICS B41J002-01; B41M005-00
CC
     74-6 (Radiation Chemistry, Photochemistry, and Photographic and
     Other Reprographic Processes)
     Section cross-reference(s): 41, 42, 46
     jet printing ink dye pigment; secondary vol av
ST
     particle diam colorant; redispersion pigment dye coated particle ink; granularity ink jet printing
     Styrene-butadiene rubber, uses
IT
     RL: MOA (Modifier or additive use); USES (Uses)
        (Nipol SX 1105; in jet printing ink containing dye-containing
        polymer particles and pigment giving image
        with granularity, gloss, and light resistance)
IT
     Surfactants
        (anionic; in jet printing ink containing dye-containing polymer
        particles and pigment giving image with granularity,
        gloss, and light resistance)
IT
     Ink-jet printers
        (cartridge; jet printing ink containing dye-containing polymer
        particles and pigment giving image with granularity,
        gloss, and light resistance)
ΙT
     Surfactants
        (cationic; in jet printing ink containing dye-containing
        polymer particles and pigment giving image
        with granularity, gloss, and light resistance)
IT
     Dyes
     Ink-jet printing
     Pigments, nonbiological
        (jet printing ink containing dye-containing polymer
        particles and pigment giving image with granularity,
        gloss, and light resistance)
ΙT
     Inks
        (jet-printing; jet printing ink containing dye-containing
        polymer particles and pigment giving image
        with granularity, gloss, and light resistance)
IT
     Acrylic polymers, uses
     Polyurethanes, uses
     RL: MOA (Modifier or additive use); USES (Uses)
        (latex; in jet printing ink containing dye-containing polymer
        particles and pigment giving image with granularity,
        gloss, and light resistance)
TΤ
     Surfactants
        (nonionic; in jet printing ink containing dye-containing
```

```
polymer particles and pigment giving image
        with granularity, gloss, and light resistance)
ΙT
     Polyvinyl butyrals
     RL: TEM (Technical or engineered material use); USES (Uses)
        (particle core; jet printing ink containing dye-containing
        polymer particles and pigment giving image
        with granularity, gloss, and light resistance)
TΤ
     Polysiloxanes, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (polymer with acrylic monomer; jet printing ink containing
        dye-containing polymer particles and pigment
        giving image with granularity, gloss, and light resistance)
IT
     161407-47-2
                   162208-01-7
                                319459-38-6
                                              321392-21-6
     323184-23-2
     RL: TEM (Technical or engineered material use); USES (Uses)
        (dye; jet printing ink containing dye-containing polymer
        particles and pigment giving image with granularity,
        gloss, and light resistance)
IT
     9002-89-5, PVA 203 35209-54-2
                                     280109-44-6, Takelac W
     RL: MOA (Modifier or additive use); USES (Uses)
        (in jet printing ink containing dye-containing polymer
        particles and pigment giving image with granularity,
        gloss, and light resistance)
     577-11-7, Pelex OT-P 9014-85-1, Olfine E 1010 9016-49
Emulgen 920 25155-30-0, Sodium dodecylbenzenesulfonate
TT
     36348-64-8, Levenol WX 52628-03-2, Newfrontier S 510
     266311-51-7, Emulgen LS 110
     RL: NUU (Other use, unclassified); USES (Uses)
        (in jet printing ink containing dye-containing polymer
        particles and pigment giving image with granularity,
        gloss, and light resistance)
     7429-90-5, Aluminum, miscellaneous
IT
                                          7439-89-6, Iron,
     miscellaneous
                     7440-70-2, Calcium, miscellaneous
     RL: MSC (Miscellaneous)
        (ions; in jet printing ink containing dye-containing polymer
        particles and pigment giving image with granularity,
        gloss, and light resistance)
IT
     980-26-7, PV Fast Pink EB
                                 980-26-7, Fastogen Super Magenta RTS
     12271-00-0, Orasol Red G
     RL: TEM (Technical or engineered material use); USES (Uses)
        (jet printing ink containing dye-containing polymer
        particles and pigment giving image with granularity,
        gloss, and light resistance)
TΤ
     26355-47-5, 2-Hydroxyethyl methacrylate-methacrylic acid-
     styrene copolymer 70977-05-8, Butyl acrylate-butyl
     methacrylate-2-hydroxyethyl methacrylate-methacrylic acid
     copolymer 85284-03-3, Acrylic acid-butyl acrylate-butyl
    methacrylate-2-hydroxyethyl methacrylate copolymer
     518020-17-2, Acrylic acid-butyl acrylate-2-hydroxyethyl
    methacrylate-sodium styrenesulfonate-styrene copolymer
     RL: TEM (Technical or engineered material use); USES (Uses)
        (jet printing ink containing dye-containing polymer
        particles and pigment particles containing)
     326794-10-9, Nipol LX 844B
IT
    RL: MOA (Modifier or additive use); USES (Uses)
        (latex; in jet printing ink containing dye-containing polymer
        particles and pigment giving image with granularity,
        gloss, and light resistance)
    79-41-4D, Methacrylic acid, polymer with silicone macromonomer and
TT
    acrylic monomer 100-42-5D, Styrene, polymer
    with silicone macromonomer and acrylic monomer 142-90-5D, Lauryl
    methacrylate, polymer with silicone macromonomer and acrylic
               818-61-1D, 2-Hydroxyethyl acrylate, polymer with
     silicone macromonomer and acrylic monomer 9011-14-7,
                                 25736-86-1D, Polyethylene glycol
    Poly(methyl methacrylate)
```

```
methacrylate, polymer with silicone macromonomer and acrylic
     monomer 272787-24-3, Butoxymethylacrylamide-ethylene glycol
     dimethacrylate copolymer
    .RL: TEM (Technical or engineered material use); USES (Uses)
        (particle core; jet printing ink containing dye-containing
        polymer particles and pigment giving image
        with granularity, gloss, and light resistance)
ΙT
     26010-51-5, 2-Hydroxyethyl methacrylate-styrene
     copolymer 28134-84-1, 2-Ethylhexyl
     acrylate-2-hydroxyethyl methacrylate-styrene
     copolymer 40704-95-8, 2-Ethylhexyl
     acrylate-2-hydroxyethyl methacrylate-methyl methacrylate
     copolymer
     RL: TEM (Technical or engineered material use); USES (Uses)
        (particle shell; jet printing ink containing dye-containing
        polymer particles and pigment giving image
        with granularity, gloss, and light resistance)
     9003-55-8
IT
     RL: MOA (Modifier or additive use); USES (Uses)
        (styrene-butadiene rubber, Nipol SX 1105; in jet
        printing ink containing dye-containing polymer
        particles and pigment giving image with granularity,
        gloss, and light resistance)
L135 ANSWER 17 OF 29 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                        2002:711048 HCAPLUS
DOCUMENT NUMBER:
                        137:234176
TITLE:
                        Ink-jet inks with good resistance to nozzle
                         clogging, water and wear and method of use
INVENTOR(S):
                         Arita, Hitoshi; Nagai, Kiyofumi; Konishi,
                         Akiko
                        Ricoh Co., Ltd., Japan
Jpn. Kokai Tokkyo Koho, 18 pp.
PATENT ASSIGNEE(S):
SOURCE:
                         CODEN: JKXXAF
DOCUMENT TYPE:
                         Patent
                         Japanese
LANGUAGE:
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
     PATENT NO.
                               DATE
                                          APPLICATION NO.
                        KIND
                                                                  DATE
     -----
                               -----
                                           -----
     JP 2002265831
                       A2
                               20020918
                                           JP 2001-69901
                                                                   2001
                                                                   0313
PRIORITY APPLN. INFO.:
                                           JP 2001-69901
                                                                   2001
                                                                   0313
OTHER SOURCE(S):
                       MARPAT 137:234176
    The inks contain (A) self-dispersible pigments, (B)
     polymer particles having average diameter of
     ≤0.5 .mu.m as film-forming component,
     (C) C≥8 polyols or glycol ethers, (D) anionic or nonionic
     surfactants, (E) water-soluble solvents and (F) water where
     the B particles have a storage modulus (measured by a frequency
     sweep over a range of 0.01-10 Hz at a strain of 1.0 in the dynamic
     viscoelasticity determination method) of <1x10-1 Pa and the A and
     B have <50 nm difference in their volume-average
    particle diameter, number-average particle diameter and area-average
    particle diameter, resp. Thus, emulsion-polymerizing acrylamide 20 with
     styrene 435, Bu acrylate 475 and methacrylic acid 30 g in
```

a continuous addition mode using K persulfate initiator in water and extended aging and neutralizing with NH4OH gave a copolymer (I) in

emulsion with solids content 40%, residual unreacted monomer content 163 ppm, film-forming min. temperature 22°, surface

```
tension 57 dyne/cm, contact angles 89° and average particle
     diameter 0.09 .mu.m. Mixing carbon black 5 with
     glycerin 5, diethylene glycol 15, 2-pyrrolidone 3,
     2-ethyl-1,3-hexanediol 2, an anionic surfactant 1,
     Proxel LV 0.2, the I 3 and balance of water to 100% gave an ink
     with freedom from nozzle clogging.
     324575-93-1P, Acrylamide-butyl acrylate-ethylene glycol
     dimethacrylate-methacrylic acid-styrene copolymer
     ammonium salt 332171-76-3P, Acrylamide-butyl
     acrylate-ethylene glycol dimethacrylate-glycidyl
     methacrylate-methacrylic acid-styrene copolymer ammonium
     RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
         (core/shell particles; manufacture of ink-jet inks containing
         film-forming polymer particles of
        compatible size to pigments with good resistance to nozzle
        clogging, water and wear)
     324575-93-1 HCAPLUS
2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,
RN
CN
     1,2-ethanediyl bis(2-methyl-2-propenoate), ethenylbenzene and
     2-propenamide, ammonium salt (9CI) (CA INDEX NAME)
     CM
     CRN
          324575-92-0
          (C10 H14 O4 . C8 H8 . C7 H12 O2 . C4 H6 O2 . C3 H5 N O)x
     CMF
     CCI PMS
           CM
                2
           CRN 141-32-2
           CMF C7 H12 O2
n-BuO-C-CH CH2
           CM
                3
           CRN 100-42-5
          CMF C8 H8
H_2C = CH - Ph
          CM
          CRN 97-90-5
          CMF C10 H14 O4
 H<sub>2</sub>C
                            CH<sub>2</sub>
Me-C-C-O-CH2-CH2-O-C-
```

CRN

5

79-41-4

CMF C4 H6 O2

CM 6

CRN 79-06-1 CMF C3 H5 N O

RN 332171-76-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 1,2-ethanediyl bis(2-methyl-2-propenoate), ethenylbenzene, oxiranylmethyl 2-methyl-2-propenoate and 2-propenamide, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 310445-08-0

CMF (C10 H14 O4 . C8 H8 . C7 H12 O2 . C7 H10 O3 . C4 H6 O2 . C3 H5 N O) \times

CCI PMS

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 106-91-2 CMF C7 H10 O3

$$\overset{\text{O}}{\longleftarrow} \overset{\text{O}}{\underset{\text{CH}_2-\text{O}-\text{C}-\text{C}-\text{Me}}{\text{Me}}} \overset{\text{CH}_2}{\underset{\text{CH}_2-\text{O}-\text{C}-\text{C}-\text{Me}}{\text{Me}}}$$

CM 4

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CM 5 CRN 97-90-5 CMF C10 H14 O4

CH₂ - C- O- CH2- CH2- O- C- C- Me Me-C-

> CM 6

CRN 79-41-4 CMF C4 H6 O2

CH2 Me-C-CO2H

> 7 CM

CRN 79-06-1 CMF C3 H5 N O

H2N-C-CH-CH2

277300-62-6P, Acrylamide-butyl acrylate-methacrylic acidstyrene copolymer ammonium salt 324575-98-6P, Acrylamide-butyl acrylate-glycidyl methacrylate-methacrylic acid-styrene copolymer ammonium salt

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (particles; manufacture of ink-jet inks containing film-forming polymer particles of compatible size to pigments with good resistance to nozzle clogging, water and wear) 277300-62-6 HCAPLUS

RN

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenylbenzene and 2-propenamide, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 50658-98-5 CMF (C8 H8 . C7 H12 O2 . C4 H6 O2 . C3 H5 N O)x CCI PMS

> CM 2

CRN 141-32-2 CMF C7 H12 O2

CRN 100-42-5 CMF C8 H8

H2C==CH-Ph

CM

CRN. 79-41-4 CMF C4 H6 O2

$$\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me-} \text{C-} \text{CO}_2 \text{H} \end{array}$$

CM 5

CRN 79-06-1 CMF C3 H5 N O

RN324575-98-6 HCAPLUS

2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, CN ethenylbenzene, oxiranylmethyl 2-methyl-2-propenoate and 2-propenamide, ammonium salt (9CI) (CA INDEX NAME)

CM

CRN 75266-11-4

CMF (C8 H8 . C7 H12 O2 . C7 H10 O3 . C4 H6 O2 . C3 H5 N O)x

CCI PMS

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM

CRN 106-91-2

CMF C7 H10 O3

CM 4

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CM 5

CRN 79-41-4 CMF C4 H6 O2

CM 6

CRN 79-06-1 CMF C3 H5 N O

IC ICM C09D011-00

ICS B41J002-01; B41M005-00; C08F285-00; C09C001-48; C09C003-00

CC 42-12 (Coatings, Inks, and Related Products)

ST clogging resistance ink jet printing pigment polymer particle size

IT Surfactants

(anionic; manufacture of ink-jet inks containing film-forming polymer particles of compatible size to pigments with good resistance to nozzle clogging, water and wear)

IT Polyoxyalkylenes, uses

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(ethers, surfactants; manufacture of ink-jet inks containing film-forming polymer particles of

compatible size to pigments with good resistance to nozzle clogging, water and wear)

IT Glycols, uses

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(ethers; manufacture of ink-jet inks containing film-forming polymer particles of compatible size to pigments with good resistance to nozzle clogging, water and wear)

```
TΤ
     Ethers, uses
     RL: MOA (Modifier or additive use); TEM (Technical or engineered
     material use); USES (Uses)
        (glycol; manufacture of ink-jet inks containing film-forming
        polymer particles of compatible size to
        pigments with good resistance to nozzle clogging, water and
        wear)
TΤ
     Inks
        (jet-printing; manufacture of ink-jet inks containing film-forming
        polymer particles of compatible size to
        pigments with good resistance to nozzle clogging, water and
        wear)
TT
     Surfactants
        (manufacture of ink-jet inks containing film-forming polymer
        particles of compatible size to pigments with good
        resistance to nozzle clogging, water and wear)
TΤ
     Surfactants
        (nonionic; manufacture of ink-jet inks containing film-forming
        polymer particles of compatible size to
        pigments with good resistance to nozzle clogging, water and
        wear)
IT
     Carbon black, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (pigments; manufacture of ink-jet inks containing film-forming
        polymer particles of compatible size to
        pigments with good resistance to nozzle clogging, water and
        wear)
     Alcohols, uses
     RL: MOA (Modifier or additive use); TEM (Technical or engineered
     material use); USES (Uses)
        (polyhydric; manufacture of ink-jet inks containing film-forming
        polymer particles of compatible size to
        pigments with good resistance to nozzle clogging, water and
TΨ
     324575-93-1P, Acrylamide-butyl acrylate-ethylene glycol
     dimethacrylate-methacrylic acid-styrene copolymer
     ammonium salt 332171-76-3P, Acrylamide-butyl
     acrylate-ethylene glycol dimethacrylate-glycidyl
     methacrylate-methacrylic acid-styrene copolymer ammonium
     RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical
     or engineered material use); PREP (Preparation); USES (Uses)
        (core/shell particles; manufacture of ink-jet inks containing
        film-forming polymer particles of
        compatible size to pigments with good resistance to nozzle
        clogging, water and wear)
     94-96-2, 2-Ethyl-1,3-hexanediol 144-19-4, 2,2,4-Trimethyl-1,3-
     pentanediol
     RL: MOA (Modifier or additive use); TEM (Technical or engineered
     material use); USES (Uses)
        (manufacture of ink-jet inks containing film-forming polymer
        particles of compatible size to pigments with good
        resistance to nozzle clogging, water and wear)
     277300-62-6P, Acrylamide-butyl acrylate-methacrylic acid-
TT
     styrene copolymer ammonium salt
     324575-98-6P, Acrylamide-butyl acrylate-glycidyl
     methacrylate-methacrylic acid-styrene copolymer
     ammonium salt
     RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
        (particles; manufacture of ink-jet inks containing
        film-forming polymer particles of
        compatible size to pigments with good resistance to nozzle
        clogging, water and wear)
     5138-18-1D, 2-Sulfosuccinic acid, esters and salts
ΙT
                                                           9003-11-6D,
     Ethylene oxide-propylene oxide copolymer, ethers 9004-78-8D,
```

Ethoxylated phenol, alkyl-substituted 25322-68-3D, Polyethylene glycol, ethers 39828-93-8D, Polyethylene glycol monocarboxymethyl ether, alkyl ether, salts RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(surfactants; manufacture of ink-jet inks containing film-forming polymer particles of compatible size to pigments with good resistance to nozzle clogging, water and wear)

L135 ANSWER 18 OF 29 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2002:539787 HCAPLUS

DOCUMENT NUMBER:

137:95569

TITLE:

Manufacture of wipes impregnated with cleaning compositions for removing stains from fabrics

ADDITION TO NO

חאתב

and carpets

INVENTOR(S):

Micciche, Robert P.; Durden, Catherine; Tripathi, Uma; Mauro, Anthony J.

PATENT ASSIGNEE(S):

Playtex Products, Inc., USA

SOURCE:

PCT Int. Appl., 33 pp.

CODEN: PIXXD2

KIND DAME

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION: DATENT NO

PATENT NO.			KIND DATE			APPLICATION NO.					1	DATE					
	WO 2002055650		31 20020710			WO 2002-US1124											
	WO	2002	:סככנ	5 U		AI		2002	0/18	'	WO 2	002-	7211.	24			2002
																	0111
		W:	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,		
			CH,	CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI	,
			GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG	,
			KP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK	,
			-	•	-	-	-			-	-	RU,			-		
						•			•	•		UΖ,	VN,	YU,	ZA,	ZW	,
					-		-	MD,	•					734	67.7	3.00	
		RW:	•	•	•	•	•	•				TZ,					
				•	•	•			-		-	GR, CM,					
				MR,	-	•			Cr,	CG,	CI,	CI-1,	GA,	GN,	σQ,	GII	,
	US	2002	•	•	•				1128	τ	JS 2	002-4	13872	2			
																:	2002
																(0110
	CA	24344	174			AA	:	20020	718	(CA 2	002-2	24344	174			
																	2002
																	0111
PRIOR	RITY	APPI	ΔN. :	INFO	. :					τ	JS 2	001-2	26139	991]	₽,	
																	2001 0112
																,	1112
										ī	IS 2	002-4	13872	2	,	A.	
															_	_	2002
																(0110
										V	NO 2	002-1	JS112	24	V	v.	
																	2002
																(111

Title cleaning composition comprises at least one surfactant AB system, at least one preservative system, and a carrier. The cleaning composition is adjusted to a pH about 7.5 to about 10.5. The wipe has a loading level ratio about 1:1 to about 10:1, based on a total weight of the cleaning composition to a total weight of the wipe. In

```
addition, the wipe cleaning composition may have at least one enhancing
     agent including a skin softening, conditioning agent, a pH control agent, a malodor reducing system, alc., and a
     soil resist. Thus, a non-alc. cleaning wipe composition comprises
     water 97.4, sodium octyl sulfate/Sodium caprylyl
     sulfonate/octoxynol-9 (surfactants) 1.6, sodium
     bicarbonate (enhancing agent) 0.5, 1-(3-chloroally1)-3,5,7-
     azoniaadamantane chloride (preservative) 0.1, anionic
     fluorosurfactant (soil resist) 0.1, and fragrance 0.3 wt%.
     9011-13-6, Styrenemaleic anhydride copolymer
IT
     9011-14-7, Methylmethacrylate polymer
     RL: MOA (Modifier or additive use); USES (Uses)
         (antisoiling agent; wipes impregnated with cleaning compns. for
        removing stains from fabrics and carpets)
RN
     9011-13-6 HCAPLUS
CN
     2,5-Furandione, polymer with ethenylbenzene (9CI) (CA INDEX NAME)
     CM
     CRN
          108-31-6
     CMF C4 H2 O3
     CM
     CRN 100-42-5
     CMF
         C8 H8
H_2C = CH - Ph
     9011-14-7 HCAPLUS
RN
     2-Propenoic acid, 2-methyl-, methyl ester, homopolymer (9CI) (CA
     INDEX NAME)
     CM
     CRN 80-62-6
     CMF
         C5 H8 O2
 H<sub>2</sub>C O
Me-C-C-OMe
     ICM C11D017-00
     ICS A61K009-70; B32B027-04
CC
     46-6 (Surface Active Agents and Detergents)
     Section cross-reference(s): 40
ΙT
     Surfactants
        (amphoteric; carpet wipes cleaning compns. containing)
     Surfactants
IT
        (anionic; carpet wipes cleaning compns. containing)
IT
     Surfactants
        (carpet wipes cleaning compns. containing)
IT
        (cationic; carpet wipes cleaning compns. containing)
IT
     Surfactants
```

(fluorosurfactants, anionic; carpet wipes cleaning compns. containing)

IT Surfactants

(nonionic; carpet wipes cleaning compns. containing)

Amine oxides IΤ

> RL: TEM (Technical or engineered material use); USES (Uses) (surfactant; carpet wipes cleaning compns. containing)

ΙT Carpets

Containers

Detergents

Impregnation Textiles

Web materials

(wipes impregnated with cleaning compns. for removing stains from fabrics and carpets)

ΤТ Surfactants

(zwitterionic; carpet wipes cleaning compns. containing) 110-16-7D, Maleic acid, polymers 9003-01-4, Acrylic acid TΤ

9003-32-1, Ethyl acrylate polymer 9003-39-8, 9011-07-8, Vinyl acetate-maleic anhydride Polyvinylpyrrolidone copolymer 9011-13-6, Styrenemaleic anhydride copolymer

9011-14-7, Methylmethacrylate polymer 9016-53-9,

25087-26-7, Methacrylic acid polymer Imidazoline polymers

RL: MOA (Modifier or additive use); USES (Uses)

(antisoiling agent; wipes impregnated with cleaning compns. for removing stains from fabrics and carpets)

126-92-1, Sodium octyl sulfate 5324-84-5, Sodium octyl sulfonate 9036-19-5, Octoxynol-9

RL: TEM (Technical or engineered material use); USES (Uses) (surfactant; wipes impregnated with cleaning compns.

for removing stains from fabrics and carpets)

REFERENCE COUNT: THERE ARE 2 CITED REFERENCES AVAILABLE 2 FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L135 ANSWER 19 OF 29 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:104789 HCAPLUS

DOCUMENT NUMBER: 136:143421

TITLE: Ion-conductive solid electrolyte membranes of

magnetically oriented meso-porous silica structures, their manufacture, and electric

devices using them Horikiri, Tomonari

Canon Inc., Japan Jpn. Kokai Tokkyo Koho, 10 pp. PATENT ASSIGNEE(S): SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE: Patent

Japanese LANGUAGE .

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

INVENTOR(S):

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
JP 2002042550	A2	20020208	JP 2000-231842		
				2000	
				0731	
PRIORITY APPLN. INFO.:			JP 2000-231842		
				2000	
				0731	

AB The invention relates to a solid electrolyte membrane comprising meso-porous silica, whose structure is magnetically oriented in one direction to obtain anisotropic ion conductivity The structure may be planar-hexagonal with monoaxially oriented meso channels or lamellar with parallel layers. The membranes, useful

```
for secondary batteries, are manufactured by hydrolyzing Si compds. on
     a substrate in the presence of surfactants and
     treating the resulting layers with a magnetic field.
     11099-06-2P, Silicic acid, ethyl ester
IT
     RL: IMF (Industrial manufacture); PEP (Physical, engineering or
     chemical process); PYP (Physical process); TEM (Technical or
     engineered material use); PREP (Preparation); PROC (Process); USES
     (Uses)
        (manufacture of solid electrolyte membranes of magnetically oriented
        ion-conductive meso-porous silica structures)
     11099-06-2 HCAPLUS
RN
     Silicic acid, ethyl ester (9CI) (CA INDEX NAME)
CN
     CM
     CRN
         1343-98-2
     CMF
         Unspecified
     CCI MAN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     CM
     CRN 64-17-5
     CMF C2 H6 O
\rm H_3C-CH_2-OH
     ICM H01B001-06
     ICS H01B013-00; H01M010-36
     76-2 (Electric Phenomena)
CC
     Section cross-reference(s): 52
     solid electrolyte oriented meso porous silica; anisotropic ion
ST
     conductor silica magnetic orientation; lamellar planar hexagonal
     porous silica electrolyte; surfactant ion conductive
     porous silica membrane
     Polyoxyalkylenes, uses
ÍΤ
     RL: TEM (Technical or engineered material use); USES (Uses)
        (ion conducting surfactant; manufacture of solid
        electrolyte membranes of magnetically oriented ion-conductive
        meso-porous silica structures)
     Surfactants
        (manufacture of membranes with; manufacture of solid electrolyte
        membranes of magnetically oriented ion-conductive meso-porous
        silica structures)
тт
     25322-68-3, Polyethylene glycol
                                       33454-82-9, Lithium
     trifluoromethanesulfonate
     RL: TEM (Technical or engineered material use); USES (Uses)
        (ion conducting surfactant; manufacture of solid
        electrolyte membranes of magnetically oriented ion-conductive
        meso-porous silica structures)
TΤ
     11099-06-2P, Silicic acid, ethyl ester
     RL: IMF (Industrial manufacture); PEP (Physical, engineering or
     chemical process); PYP (Physical process); TEM (Technical or
     engineered material use); PREP (Preparation); PROC (Process); USES
     (Uses)
        (manufacture of solid electrolyte membranes of magnetically oriented
        ion-conductive meso-porous silica structures)
     57-09-0, Hexadecyltrimethylammonium bromide
     RL: NUU (Other use, unclassified); USES (Uses)
        (surfactant; manufacture of solid electrolyte membranes of
        magnetically oriented ion-conductive meso-porous silica
        structures)
```

L135 ANSWER 20 OF 29 HCAPLUS COPYRIGHT 2006 ACS on STN

2001:792244 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 135:336890

TITLE: Aggregation processes in manufacture of toners

INVENTOR(S): Cheng, Chieh-min PATENT ASSIGNEE(S): Xerox Corp., USA U.S., 14 pp. CODEN: USXXAM SOURCE:

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
US 6309787	B1	20011030	US 2000-558538		
				2000	
				0426	
PRIORITY APPLN. INFO.:			US 2000-558538		
				2000	
				0426	

AB The present invention is directed to colorant and toner processes which utilize aggregation and coalescence, or fusion of a latex, colorant, such as pigment, dye and optional additive particles to form toner compns. with a volume average diameter 1-25 .mu.m. A process comprises aggregating a colorant encapsulated polymer particle containing a colorant with colorant particles and wherein said colorant encapsulated latex is generated by a miniemulsion polymerization

IT 321309-05-1P, Butyl acrylate-2-carboxyethyl acrylatestyrene copolymer

RL: NUU (Other use, unclassified); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

(aggregation process of making encapsulated colorant and toner)

RN321309-05-1 HCAPLUS

2-Propenoic acid, butyl ester, polymer with 2-carboxyethyl CN 2-propenoate and ethenylbenzene (9CI) (CA INDEX NAME)

CM

CRN 24615-84-7 CMF C6 H8 O4

CM 2

CRN 141-32-2 C7 H12 O2 CMF

CM 3 CRN 100-42-5 CMF C8 H8

 $H_2C == CH - Ph$

ICM G03G009-08

ICS C08J003-16

INCL 430137140

74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 35, 38, 46

aggregation colorant surfactant encapsulate toner ST emulsion polymn

IT Surfactants

(aggregation process of making encapsulated colorant and toner)

9036-19-5, Antarox CA 897 IT

RL: TEM (Technical or engineered material use); USES (Uses) (Antarox CA 897, surfactant; aggregation process of making encapsulated colorant and toner)

ΙT 321309-05-1P, Butyl acrylate-2-carboxyethyl acrylatestyrene copolymer

RL: NUU (Other use, unclassified); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

(aggregation process of making encapsulated colorant and toner)

7727-54-0, Ammonium persulfate 12626-49-2, Dowfax 2A1

25155-30-0, Biosoft D 40

RL: TEM (Technical or engineered material use); USES (Uses)

(surfactant; aggregation process of making encapsulated colorant and toner)

THERE ARE 33 CITED REFERENCES AVAILABLE REFERENCE COUNT: 33 FOR THIS RECORD. ALL CITATIONS AVAILABLE

IN THE RE FORMAT

L135 ANSWER 21 OF 29 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2001:463282 HCAPLUS

DOCUMENT NUMBER:

135:47082

TITLE:

Vinyl chloride polymer compositions giving

impact-resistant extruded articles

INVENTOR(S):

Momose, Masaru; Sakabe, Hiroshi; Yoshida,

Katsumi

PATENT ASSIGNEE(S):

Kureha Chemical Industry Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001172458	A2	20010626	JP 1999-360713	
				1999 1220
PRIORITY APPLN. INFO.:			JP 1999-360713	1220
			01 1333 500.10	1999
				1220

AB The compns., useful for extrusion materials, contain 85-99% vinyl chloride polymers and 1-15% graft polymers [vol .-average particle diameter (Dv) >80 and \leq 140 nm], as impact modifiers, prepared by grafting 5-15% monomers consisting of 30-100% C1-4 alkyl methacrylates and 0-70%

other vinyl monomers onto 85-95% butadiene (co)polymer rubbers consisting of 85-100% 1,3-butadiene and 0-15% copolymerizable vinyl monomers in the presence of anionic surfactants selected from sulfate ester surfactants and sulfonate surfactants. Thus, 80 parts butadiene was emulsion-polymerized with 6 parts Bu acrylate in the presence of Na4P2O7, FeSO4, EDTA-2Na, Na formaldehyde sulfoxylate, and di-Na dodecylphenyl ether disulfonate to give a rubber latex (Dv 103 nm), which was grafted with 13 parts Me methacrylate and 1 part Et acrylate in the presence of tert-BuOOH to give a graft copolymer (Dv 107 nm). A composition containing 4.5 parts of the graft copolymer, 95.5 parts PVC (S 901K), and additives was extruded to give test pieces showing 60° gloss 78%, impact strength (23°) 175 kJ/m2, and good appearance. 106856-30-8P, Butadiene-butyl acrylate-ethyl acrylate-methyl methacrylate graft copolymer 107439-29-2P , Butadiene-methyl methacrylate graft copolymer 131757-32-9P, Acrylonitrile-butadiene-divinylbenzenemethyl methacrylate-styrene graft copolymer RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP (Properties); PREP (Preparation); USES (Uses) (impact modifier; PVC compns. containing emulsion-grafted butadiene rubber particles for impact-resistant extruded articles) 106856-30-8 HCAPLUS 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 1,3-butadiene, butyl 2-propenoate and ethyl 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

TT

RN

CN

CRN 141-32-2 CMF C7 H12 O2

CM 2

CRN 140-88-5 CMF C5 H8 O2

CM 3

CRN 106-99-0 CMF C4 H6

H2C== CH- CH== CH2

CM 4

CRN 80-62-6 CMF C5 H8 O2

RN 107439-29-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 1,3-butadiene, graft (9CI) (CA INDEX NAME)

CM 1

CRN 106-99-0 CMF C4 H6

 $_{\rm H_2C}$ — $_{\rm CH}$ — $_{\rm CH_2}$

CM 2

CRN 80-62-6 CMF C5 H8 O2

RN 131757-32-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 1,3-butadiene, diethenylbenzene, ethenylbenzene and 2-propenenitrile, graft (9CI) (CA INDEX NAME)

CM 1

CRN 1321-74-0 CMF C10 H10 CCI IDS



CM 2

CRN 107-13-1 CMF C3 H3 N

 $H_2C = CH - C = N$

CM 3

```
CRN 106-99-0
     CMF C4 H6
H_2C = CH - CH = CH_2
     CM
     CRN 100-42-5
     CMF C8 H8
H2C== CH- Ph
     CM
          5
     CRN 80-62-6
     CMF C5 H8 O2
 H<sub>2</sub>C O
Me-C-C-OMe
     ICM C08L027-06
     ICS B29C047-00; C08F279-02; C08L027-06; C08L051-04; B29K009-00;
          B29K027-06; B29K033-04
CC
     37-6 (Plastics Manufacture and Processing)
     Section cross-reference(s): 38
ST
     PVC impact modifier butadiene acrylic graft; rubber butadiene
     graft polymn anionic surfactant
IT
     28519-02-0, Disodium dodecyldiphenyl ether disulfonate
     RL: NUU (Other use, unclassified); USES (Uses)
        (anionic emulsifier; PVC compns. containing
        emulsion-grafted butadiene rubber particles for
        impact-resistant extruded articles)
IT
     106856-30-8P, Butadiene-butyl acrylate-ethyl
     acrylate-methyl methacrylate graft copolymer 107439-29-2P
     , Butadiene-methyl methacrylate graft copolymer
     131757-32-9P, Acrylonitrile-butadiene-divinylbenzene-
     methyl methacrylate-styrene graft copolymer
     RL: IMF (Industrial manufacture); MOA (Modifier or additive use);
     PRP (Properties); PREP (Preparation); USES (Uses)
        (impact modifier; PVC compns. containing emulsion-grafted butadiene
        rubber particles for impact-resistant extruded articles)
L135 ANSWER 22 OF 29 HCAPLUS COPYRIGHT 2006 ACS on STN
                         2001:371572 HCAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                         134:367384
TITLE:
                         Preparation of polymer emulsions
                         with high solids, low viscosity and
                         wide particle size distribution by two-stage
                         polymerization
INVENTOR(S):
                         Furo, Masatami; Taichi, Yasuo; Onishi, Kiyoshi
PATENT ASSIGNEE(S):
                         Dainippon Ink and Chemicals, Inc., Japan
SOURCE:
                         Jpn. Kokai Tokkyo Koho, 7 pp.
                         CODEN: JKXXAF
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         Japanese
FAMILY ACC. NUM. COUNT:
```

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001139610	A2	20010522	JP 1999-326717	
				1999
				1117
PRIORITY APPLN. INFO.:			JP 1999-326717	
				1999
				1117

AR The emulsion is prepared by first-stage emulsion polymerizing radical polymerizable monomers [e.g., 2-ethylhexyl acrylate, Me methacrylate, styrene, methacrylic acid and A 174 (3-methacryloxypropyltrimethoxysilane)] in the presence of a surfactant [e.g., Levenol WZ (polyoxyethylene nonylphenyl ether sodium sulfate), Aerosil OT 75 (dioctyl sulfosuccinate sodium sulfate) and Noigen EA 130T (polyoxyethylene nonyl Ph ether)] in an aqueous medium to form a emulsion having volume average particle diameter 0.5-1.0 . mu.m; and adding radical polymerizable monomers (e.g., 2-ethylhexyl acrylate, Me methacrylate, methacrylic acid and A 174) and a surfactant (e.g., Levenol WZ) into the first-stage emulsion to carry on a second-stage polymerization, wherein the volume average particle diam of polymer particle obtained by 2nd stage emulsion polymerization is smaller than that of the polymer particle obtained by the 1st step emulsion polymerization The polymer aqueous emulsions are useful for coatings and adhesives.

IT 340143-01-3P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(preparation of **polymer** emulsions with high **solids** , low viscosity and wide particle size distribution by two-stage polymerization)

RN 340143-01-3 HCAPLUS

2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene, 2-ethylhexyl 2-propenoate, methyl 2-methyl-2-propenoate and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CN

CRN 2530-85-0 CMF C10 H20 O5 Si

CM 2

CRN 103-11-7 CMF C11 H20 O2

```
CH=CH2
Et-CH-Bu-n
     CM
     CRN 100-42-5
     CMF C8 H8
H_2C = CH - Ph
     CM
          4
     CRN 80-62-6
     CMF C5 H8 O2
 H<sub>2</sub>C O
      Me-C-C-OMe
     CM
     CRN 79-41-4
     CMF
         C4 H6 O2
   CH<sub>2</sub>
Me-C-CO2H
IC
    ICM C08F002-24
     35-4 (Chemistry of Synthetic High Polymers)
CC
     Section cross-reference(s): 38, 42
     acrylic polymer emulsion prepn two stage; polysiloxane acrylic
     graft emulsion solid coating; adhesive polysiloxane acrylic
     emulsion low viscosity; particle size distribution
     polymer emulsion prepn
ΙT
     Polymerization
        (emulsion, two-stage; preparation of polymer emulsions
        with high solids, low viscosity and wide particle
        size distribution by two-stage polymerization)
IT
     Adhesives
     Coating materials
       Particle size
        (preparation of polymer emulsions with high solids
        , low viscosity and wide particle size distribution by
        two-stage polymerization)
IT
     340143-01-3P
     RL: IMF (Industrial manufacture); POF (Polymer in formulation);
     TEM (Technical or engineered material use); PREP (Preparation);
     USES (Uses)
        (preparation of polymer emulsions with high solids
        , low viscosity and wide particle size distribution by
```

two-stage polymerization)

L135 ANSWER 23 OF 29 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:42707 HCAPLUS

DOCUMENT NUMBER: 130:111035

TITLE: Monodisperse dilatant polymer dispersions and

their preparation

INVENTOR(S): Rupaner, Robert; Horn, Frank M.; Richtering,

Walter; Muelhaupt, Rolf

PATENT ASSIGNEE(S):

BASF A.-G., Germany Ger. Offen., 8 pp.

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19757669	A1	19990107	DE 1997-19757669	
				1997
				1223
PRIORITY APPLN. INFO.:			DE 1997-19757669	
				1997
				1223

Dilatant copolymer dispersions with average particle size 0.2-20 .mu.m and particle size dispersity (volume-average/number-average particle diameter) <1.4, useful in the manufacture of impact-resistant plastics, toners, antistatic finishes, etc., are prepared by interfacial polymerization of (A) ethylene, styrene, butadiene, CH2:CHC1, CH2:CC12, (meth)acrylonitrile, (meth)acrylate ester(s), and/or vinyl esters of C2-16 monocarboxylic acids 90-99.8, (B) carboxyl group-free C2-12 charged olefinic monomers containing (un- or partially) neutralized SO3H, OSO3H, PO3H2, or OPO3H2 groups 0.02-10, and (C) C3-5 unsatd. carboxylic acids or amides or glycidyl or hydroxyethyl esters 0-5 weight% in the presence of <0.1 weight% emulsifier and/or protective colloid and 0.01-5 weight% water-soluble salt of a metal of valence ≥2. Thus, addition of 1.9 g K2S208 in 40 mL H2O to a mixture of 0.4 g p-CH2:CHC6H4SO3K, 0.865 g CaCl2, and 200 mL styrene in 1 L H2O at 80° and polymerization for 10 h at that temperature gave, after removal of the coaqulate by filtration, a dispersion (12.8% solids, pH 3.1) of copolymer particles with average particle size 1206 nm, standard deviation 56 nm, and surface charge d. 22.2 μ C/cm2. 31619-79-1P, Sodium p-styrenesulfonate-styrene TΤ copolymer 77017-76-6P 123773-37-5P 219635-76-4P 219635-79-7P RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation) (preparation of monodisperse dilatant polymer dispersions) RN 31619-79-1 HCAPLUS Benzenesulfonic acid, 4-ethenyl-, sodium salt, polymer with CN

СМ

CRN 2695-37-6

1

CMF C8 H8 O3 S . Na

ethenylbenzene (9CI) (CA INDEX NAME)

```
HO<sub>3</sub>S

CH=CH<sub>2</sub>
```

Na

CM 2

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

RN 77017-76-6 HCAPLUS

CN Benzenesulfonic acid, 4-ethenyl-, potassium salt, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 4551-90-0 CMF C8 H8 O3 S . K

● K

CM 2

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

RN 123773-37-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with potassium 4-ethenylbenzenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 4551-90-0 CMF C8 H8 O3 S . K

$$_{ ext{HO}_3 ext{S}}$$

● K

CM 2

CRN 80-62-6 CMF C5 H8 O2

RN 219635-76-4 HCAPLUS
CN 2-Propenoic acid, polymer with butyl 2-propenoate, ethenylbenzene, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt and sodium 4-ethenylbenzenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 5165-97-9 CMF C7 H13 N O4 S . Na

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{NH-C-CH} = \text{CH}_2 \\ \parallel \\ \text{Me-C-CH}_2 - \text{SO}_3\text{H} \\ \parallel \\ \text{Me} \end{array}$$

Na

CM 2

CRN 2695-37-6 CMF C8 H8 O3 S . Na

Na

CM 3

CRN 141-32-2 CMF C7 H12 O2

CM 4

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CM 5

CRN 79-10-7 CMF C3 H4 O2

$$\begin{matrix} \text{O} \\ || \\ \text{HO-C-CH} \end{matrix} = \text{CH}_2$$

RN 219635-79-7 HCAPLUS CN 2-Propenoic acid, 1,1

2-Propenoic acid, 1,1-dimethylethyl ester, polymer with ethenesulfonic acid, ethenylbenzene and ethenylphosphonic acid, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 219635-78-6

CMF (C8 H8 . C7 H12 O2 . C2 H5 O3 P . C2 H4 O3 S) x

CCI PMS

CM 2

CRN 1746-03-8 CMF C2 H5 O3 P

 $H_2C = CH - PO_3H_2$

CM 3

CRN 1663-39-4 CMF C7 H12 O2

```
CM
          CRN 1184-84-5
          CMF C2 H4 O3 S
H2C=CH-SO3H
          CM
               5
          CRN 100-42-5
          CMF C8 H8
H_2C = CH - Ph
     ICM C08F002-24
     ICS C08F212-08; C08F220-18; C08F220-42; C08F218-04; C08F214-06;
          C08F214-08; C08F210-02; C08F236-06
     37-3 (Plastics Manufacture and Processing)
     9002-89-5, Mowiol 10-88
TT
     RL: TEM (Technical or engineered material use); USES (Uses)
        (emulsifier; in preparation of monodisperse dilatant
        polymer dispersions)
IT
     31619-79-1P, Sodium p-styrenesulfonate-styrene
     copolymer
                64112-33-0P 77017-76-6P 123773-37-5P
     219635-76-4P 219635-79-7P
     RL: IMF (Industrial manufacture); PRP (Properties); PREP
     (Preparation)
        (preparation of monodisperse dilatant polymer dispersions)
L135 ANSWER 24 OF 29 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         1998:262496 HCAPLUS
DOCUMENT NUMBER:
                         128:321988
TITLE.
                         Iron(II) chloride catalyzed emulsion
                         polymerization of methyl methacrylate using
                         different initiators
                         Moustafa, A. B.; Faizalla, A.; Abd El Hady, B.
AUTHOR (S):
CORPORATE SOURCE:
                         Department of Polymers and Pigments, National
                         Research Center, Cairo, Egypt
SOURCE:
                         Journal of Applied Polymer Science (1998),
                         68(11), 1725-1738
                         CODEN: JAPNAB: ISSN: 0021-8995
PUBLISHER:
                         John Wiley & Sons, Inc.
DOCUMENT TYPE:
                         Journal
LANGUAGE:
                         English
     The emulsifier and emulsifier-free emulsion
     polymerization of Me methacrylate (MMA) using sodium bisulfite,
     acetaldehyde sodium bisulfite (ACSB), octyladehyde sodium
     bisulfite (OSB), benzaldehyde sodium bisulfite (BSB), and acetone
     sodium bisulfite (ASB) as different initiators, and Na
     dodecylbenzenesulfonate (DBSS) as an emulsifier, were
     carried out at 30, 40, and 50°. The effect of temperature, FeCl2, and the type of initiator on the tacticity of the obtained
     polymers was investigated by means of NMR spectroscopy. The
     effect of FeCl2 and the four carbonyl adducts (ACSB, OSB, BSB, and
     ASB) on the volume-average diameter and the
     number of polymer particles per unit volume was
     studied. FeCl2 had a pronounced catalytic effect on the emulsion
```

polymerization The initiating powers of ACSB, BSB, OSB, and ASB were

```
3.27, 0.6, 1.78, and 0.23, resp. The rate of emulsion polymerization and
    viscosity-average mol. weight depended on the DBSS, concentration, initiator
    type and concentration, temperature, and amount of catalyst (FeCl2).
    9011-14-7P, PMMA
TT
    RL: SPN (Synthetic preparation); PREP (Preparation)
```

(emulsion preparation in presence of ferrous chloride catalyst) 9011-14-7 HCAPLUS RN

CN 2-Propenoic acid, 2-methyl-, methyl ester, homopolymer (9CI) INDEX NAME)

CM 1

CRN 80-62-6 C5 H8 O2 CMF

H₂C O I Me-C-C-OMe

35-3 (Chemistry of Synthetic High Polymers) CC 25155-30-0, Sodium dodecylbenzenesulfonate RL: MOA (Modifier or additive use); USES (Uses) (emulsifier; Me methacrylate kinetics of emulsion polymerization in presence of)

9011-14-7P, PMMA ΤТ

RL: SPN (Synthetic preparation); PREP (Preparation)

(emulsion preparation in presence of ferrous chloride catalyst) THERE ARE 13 CITED REFERENCES AVAILABLE REFERENCE COUNT: 13

FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L135 ANSWER 25 OF 29 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1997:416559 HCAPLUS

DOCUMENT NUMBER:

127:66649

TITLE:

Manufacture of spherical resin microparticle

aqueous dispersions by phase-reversion

emulsification with a sharp size distribution

with good size reproducibility

INVENTOR(S):

Mo, Keni; Inaba, Fumihiko; Nomura, Minoru;

Ominato, Hiroyuki; Sakurai, Hiroko

PATENT ASSIGNEE(S):

Dainippon Ink and Chemicals, Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp. CODEN: JKXXAF

Patent

DOCUMENT TYPE: LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09111000	A2	19970428	JP 1995-266948	
				1995
				1016
PRIORITY APPLN. INFO	.:		JP 1995-266948	
				1995
				1016

The title dispersions are prepared by using a stirring apparatus having a rotating shaft with a main stirring blade at bottom pushing fluid media upward and upper auxiliary blades of paddling and scraping and pushing the fluid medium downward and baffle plates on the bath inner wall; the auxiliary blades are placed to cause phase misalignment, wherein a water-dispersible water-insol. resin solution

in organic solvent is mixed with an aqueous medium for phase-reversion emulsification, or the phase-reversion emulsification can also be caused by adding an aqueous medium containing emulsifiers and/or dispersion stabilizers to the water-insol. resin solution in organic solvent. A copolymer made from acrylic acid 77, styrene 600, 2-ethylhexyl acrylate 143, and Me methacrylate 180 parts in MEK was treated with MEK, isopropanol and 1N NaOH to obtain spherical microparticles with weight-average diameter 7.8 .mu.m, volume-/numberaverage diameter ratio 1.13.

ΙT 190788-24-0P

RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation)

(manufacture of spherical resin microparticle aqueous dispersions by phase-reversion emulsification with a sharp size distribution with good size reproducibility)

RN 190788-24-0 HCAPLUS

2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenylbenzene, 2-ethylhexyl 2-propenoate and 2-propenoic acid, sodium salt (9CI) (CA INDEX NAME)

CM

CN

CRN 27306-43-0

CMF (C11 H20 O2 . C8 H8 . C5 H8 O2 . C3 H4 O2)x CCI

CM 2

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \mathsf{O} \\ || \\ \mathsf{CH}_2 - \mathsf{O} - \mathsf{C} - \mathsf{CH} == \mathsf{CH}_2 \\ || \\ \mathsf{Et} - \mathsf{CH} - \mathsf{Bu} - \mathsf{n} \end{array}$$

CM 3

CRN 100-42-5 CMF C8 H8

H2C= CH- Ph

CM 4

CRN 80-62-6 CMF C5 H8 O2

CM 5

79-10-7 CRN

CMF C3 H4 O2

```
HO- C- CH= CH2
    ICM C08J003-14
IC
    ICS B01F007-16; B01F007-18; G03G009-09; G03G009-087; C08L101-00
     37-6 (Plastics Manufacture and Processing)
     acrylic polymer spherical microparticle;
     stirrer phase reversion emulsification
     Emulsification
    Mixers (processing apparatus)
     Powders
        (manufacture of spherical resin microparticle aqueous
        dispersions by phase-reversion emulsification with a sharp size
        distribution with good size reproducibility)
IT
     190788-24-0P
     RL: IMF (Industrial manufacture); PRP (Properties); PREP
     (Preparation)
        (manufacture of spherical resin microparticle aqueous
        dispersions by phase-reversion emulsification with a sharp size
       distribution with good size reproducibility)
L135 ANSWER 26 OF 29 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1997:388697 HCAPLUS
DOCUMENT NUMBER:
                        127:19732
TITLE:
                        Water-washable ink compositions
INVENTOR(S):
                        Kawaguchi, Takashi
                     Brother Industries, Ltd., Japan
PATENT ASSIGNEE(S):
                        Jpn. Kokai Tokkyo Koho, 5 pp.
SOURCE:
                        CODEN: JKXXAF
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
                                         APPLICATION NO.
    PATENT NO.
                        KIND DATE
                                                                  DATE
                              -----
                                           ------
    JP 09100432
                       A2 19970415
                                          JP 1995-256125
                                                                  1995
                                                                  1003
PRIORITY APPLN. INFO.:
                                           JP 1995-256125
                                                                  1995
                                                                  1003
    Title compns. contain solvent-dispersed metal-deposited powdered
AB
    colorants having a volume-average diameter of
    ≥1 .mu.m. A black cloth was marked
    with an ink containing water 63, ethylene glycol 15, a
    dispersant 1, a binder 1, and Al-deposited Techpolymer MBX
    8 particles 20 parts to form silver markings, which were easily
    washed off by water.
IT
    53621-05-9, Techpolymer MBX 8
    RL: TEM (Technical or engineered material use); USES (Uses)
        (Techpolymer MBX 8, Al-deposited; metal-deposited powdered
       colorant-containing aqueous marking inks with water washability for
       fabric sewing)
    53621-05-9 HCAPLUS
RN
CN
    2-Propenoic acid, 2-methyl-, 1,6-hexanediyl ester, polymer with
```

methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM

CRN 6606-59-3 CMF C14 H22 O4

CM 2

CRN 80-62-6 CMF C5 H8 O2

IC ICM C09D011-02

ICS A41H003-00

CC 42-12 (Coatings, Inks, and Related Products)

Section cross-reference(s): 40

IT Polymers, uses

RL: TEM (Technical or engineered material use); USES (Uses)
(metal-deposited, particles; metal-deposited powdered
colorant-containing aqueous marking inks with water washability for
fabric sewing)

IT Metals, uses

RL: TEM (Technical or engineered material use); USES (Uses)
(on polymers, particles; metal-deposited
powdered colorant-containing aqueous marking inks with water
washability for fabric sewing)

IT 53621-05-9, Techpolymer MBX 8

RL: TEM (Technical or engineered material use); USES (Uses)
(Techpolymer MBX 8, Al-deposited; metal-deposited powdered
colorant-containing aqueous marking inks with water washability for
fabric sewing)

L135 ANSWER 27 OF 29 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1990:414731 HCAPLUS

DOCUMENT NUMBER: 113:14731

TITLE: Toner for electrostatic image development INVENTOR(S): Otani, Shoji; Takemura, Kazunari; Sato, Yukiya; Inaguma, Kazunari; Tsushima, Rikio

PATENT ASSIGNEE(S): Kao Corp., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01223470	A2	19890906	JP 1988-49336	
				1988
				0302
PRIORITY APPLN. INF	0.:		JP 1988-49336	
				1988
				0302

```
AB
     The title toner is obtained by suspension polymerization in an aq
     . medium of a monomer composition containing a charge regulator and a
     colorant and is characterized by particles having a coefficient of
     deviation y = 100 \text{ S/x} (%) [S = standard deviation (\mu
     m) of toner volume distribution; x = volume
     average diameter (.mu.m) of toner]
     with y satisfying the relation 60 + x-0.67 < y < 135 +
     x-0.67. The polymerization is carried out in the presence of Ca
     phosphate and an anionic surfactant as a suspension
     stabilizer.
IT
     25153-46-2, 2-Ethylhexylacrylate-styrene
     copolymer
     RL: TEM (Technical or engineered material use); USES (Uses)
         (electrophotog. toner containing)
     25153-46-2 HCAPLUS
RN
     2-Propenoic acid, 2-ethylhexyl ester, polymer with ethenylbenzene
            (CA INDEX NAME)
     CM
          1
     CRN 103-11-7
     CMF C11 H20 O2
    CH2-O-C-CH=CH2
Et-CH-Bu-n
     CM
          2
     CRN
          100-42-5
     CMF
          C8 H8
H_2C = CH - Ph
TC
     ICM G03G009-08
     74-3 (Radiation Chemistry, Photochemistry, and Photographic and
     Other Reprographic Processes)
ST
     electrophotog toner polymer particle size
     Electrophotographic developers (toners, polymer, with controlled particle
IT
        size distribution)
IT
     25153-46-2, 2-Ethylhexylacrylate-styrene
     copolymer
     RL: TEM (Technical or engineered material use); USES (Uses)
        (electrophotog. toner containing)
L135 ANSWER 28 OF 29 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                          1989:198959 HCAPLUS
DOCUMENT NUMBER:
                          110:198959
TITLE:
                          Air fresheners containing
                          dipropylene glycol alkyl ethers, gelation
                          agents, and perfumes
INVENTOR(S):
                          Asagoe, Toru; Kato, Hiroshi
PATENT ASSIGNEE(S):
                          Hasegawa, T., Co., Ltd., Japan
SOURCE:
                          Jpn. Kokai Tokkyo Koho, 5 pp.
                          CODEN: JKXXAF
DOCUMENT TYPE:
                          Patent
                          Japanese
LANGUAGE:
FAMILY ACC. NUM. COUNT:
```

PATENT INFORMATION:

```
.... NO.
    PATENT NO.
                    KIND DATE
                                    APPLICATION NO.
                                                       DATE
                         -----
                                    -----
   JP 63043666
                   A2
                          19880224
                                    JP 1986-187860
                                                       1986
                                                       0812
                   B4 19930902
   JP 05060387
PRIORITY APPLN. INFO.:
                                    JP 1986-187860
                                                       1986
                                                       0812
```

AΒ Aqueous gel fragrant compns. as air fresheners contain dipropylene glycol alkyl ether and(or) propylene glycol alkyl ether 0.1-40.0, a gelation agent 0.1-15.0, a perfume 0.1-30.0, and H2O 50.0-95.0 % by weight Bad odors are eliminated by the compns. and replaced by perfumes. Thus, an air freshener was prepared consisting of carrageenan 2.0, locust bean gum 0.2, dipropylene glycol Me ether 10.0, a lemon fragrance 10.0, an emulsifier 1.0, and deionized water 76.8% by weight

ΙT 52125-53-8

RL: BIOL (Biological study)

(air freshener gels containing)

52125-53-8 HCAPLUS RN

Propanol, 1(or 2)-ethoxy- (9CI) (CA INDEX NAME)

CM 1

CRN 64-17-5 CMF C2 H6 O

H3C-- CH2-OH

2 CM

CRN 57-55-6 CMF C3 H8 O2

OH H₃C- СН- СН₂- ОН

IC ICM A61L009-01

ICS C11B009-00

CC 62-5 (Essential Oils and Cosmetics)

air freshener propylene glycol ether; gelation ST agent air freshener; dipropylene glycol ether air freshener gel

TТ Perfumes and Essences

(air freshener gels containing (di)propylene glycol alkyl ethers and)

TΤ Gelation

> (agents, air freshener gels containing (di)propylene glycol alkyl ethers and)

IT Deodorants

> (air fresheners, gels, containing (di)propylene glycol alkyl ethers and gelation agents and perfumes)

1320-67-8, Propylene glycol methyl ether 15764-24-6, Dipropylene IT glycol ethyl ether 34590-94-8 52125-53-8

RL: BIOL (Biological study)
(air freshener gels containing)

L135 ANSWER 29 OF 29 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1954:28843 HCAPLUS

DOCUMENT NUMBER: 48:28843
ORIGINAL REFERENCE NO.: 48:5207c-g

TITLE: Organic compounds of titanium

INVENTOR(S): Bostwick, Charles O.

PATENT ASSIGNEE(S): E. I. du Pont de Nemours & Co.

DOCUMENT TYPE: Patent LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

US 2643262 19530623 US

The preparation is described of several polyene glycol titanates, useful as adhesives, as surface-active agents, and as additives for gasoline, and for various coating and sealing compns. The glycol titanates may be either complex monomers or polymers, and are frequently chelated. Depending upon the reactants used and the exact composition, the products may be simply liquids, highly viscous or tacky materials, or powdery solids. Alcoholysis of organic esters of H4TiO4 is effected with 2,3-disubstituted 1,3-diols to yield glycol titanates with the structure .tplbond.TiOCH2CHRCHR'O-. R and R' may be the same or different organic radicals. PrCH(OH)CHBtCH2OH (I), 43.8 and (iso-PrO)4Ti, 85.3 parts by weight, are intimately mixed in n-C7H16(heat is evolved), an equal volume of H2O is added, and, after separation, the C7H16 layer is evaporated to give a white powdery product, mol. weight 1520, TiO2 content 39.3%, in which R and R' are believed to be Et and Pr groups, resp. Mixing I, 19.47 and (BuO) 4Ti, 22.6 parts gives a liquid product containing BuOH, useful without further treatment as a surfaceactive agent (R and R' are apparently Et and Pr,

resp.). I 462.2 and (EtO)4Ti 361 parts with an equal volume of cyclohexane, and after alcoholysis the product is washed with water and the cyclohexane evaporated at 230° to give a clear, viscous liquid, mol. weight 1210, TiO2 content 24.9%. EtCH(OH)CHMeCH2OH 2, and (iso-PrO)4Ti 1 mole mixed as usual and hydrolyzed by heating with H2O give a highly viscous, tacky, polymeric material in which R and R' are Me and Et, resp. 2-PrBuCH(OH)CHMeCH2OH 3 and (tert-BuO)4Ti 1 mole mixed in cyclohexane, then washed with H2O, give [HOCHBuCHPrCH2O]2Ti(OH)2, in which the HO groups on the alkyl chains are chelated with Ti. I 584, and (iso-BuO)4Ti 340 parts, mixed in C6H6 and heated to 200° give a sirupy product similar to [HOCHPrCHEtCH20]4Ti, in which 2 of the HO groups are chelated with Ti. MeCH(OH)CHBuCH2OH 584 and (iso-PrO)4Ti 284 parts, heated at 200° give a product of mol. weight 684 and TiO2 content 14.7%. Cf. C.A. 36, 595.4.

IT 3087-36-3, Ethyl titanate

(reactions of, with dihydric alcs.)

RN 3087-36-3 HCAPLUS

CN Ethanol, titanium(4+) salt (9CI) (CA INDEX NAME)

 $_{\mathrm{H_3C-CH_2-OH}}$

●1/4 Ti(IV)

```
=> => d que stat 1136
1.1
                1 SEA FILE=HCAPLUS ABB=ON PLU=ON US20050113267/PN
                1 SEA FILE=REGISTRY ABB=ON PLU=ON 24937-78-8/RN
L3
           13973 SEA FILE=REGISTRY ABB=ON PLU=ON 108-05-4/CRN
L4
L5
           13674 SEA FILE=REGISTRY ABB=ON PLU=ON 74-85-1/CRN
            2018 SEA FILE=REGISTRY ABB=ON PLU=ON L4 AND L5
L6
           1 SEA FILE=REGISTRY ABB=ON PLU=ON 9011-14-7/RN 71568 SEA FILE=REGISTRY ABB=ON PLU=ON 80-62-6/CRN
L7
L8
                1 SEA FILE=REGISTRY ABB=ON PLU=ON 9003-53-6/RN
L9
                1 SEA FILE=REGISTRY ABB=ON PLU=ON 100-42-5/RN
L10
           71910 SEA FILE=REGISTRY ABB=ON PLU=ON 100-42-5/CRN
L11
            1 SEA FILE=REGISTRY ABB=ON PLU=ON 9004-57-3/RN 7489 SEA FILE=REGISTRY ABB=ON PLU=ON 64-17-5/CRN
L12
L13
          452330 SEA FILE=HCAPLUS ABB=ON PLU=ON SURFACT? OR BIOSURFACT
L14
                  ? OR HYDROTROP? OR DETERG? OR ABSTERG? OR (SURFACE(W) AC
                  TIVE# OR WETTING# OR FOAMING#)(A)(AGENT? OR ADDITIVE?
                  OR COMPOUND? OR COMPD# OR CMPD#) OR EMULSIFIER? OR
                  DISPERSANT? OR SOAP? OR SHAMPOO?
           3523 SEA FILE=HCAPLUS ABB=ON PLU=ON FABRIC(2A)SOFTEN?
38073 SEA FILE=HCAPLUS ABB=ON PLU=ON L3
1.15
L16
           42394 SEA FILE=HCAPLUS ABB=ON PLU=ON L6
L17
L18
           91090 SEA FILE=HCAPLUS ABB=ON PLU=ON L4
          267816 SEA FILE=HCAPLUS ABB=ON PLU=ON L5
T.19
          46462 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND L19
453929 SEA FILE=HCAPLUS ABB=ON PLU=ON L14 OR L15
L20
L21
                  QUE ABB=ON PLU=ON FRAGANC? OR PERFUM? OR PARFUM? OR
1.25
                  COLOGNE? OR ODOR? OR AROMA? OR SMELL? OR SCENT? OR OLFA
                  CT? OR ESSENCE? OR BOUQUET?
L26
            5463 SEA FILE=HCAPLUS ABB=ON PLU=ON L25(2A) (PLEAS? OR
                  AGREEABL? OR NICE OR GOOD? OR BLISS? OR SWEET? OR
                  DULCET?)
            6201 SEA FILE=HCAPLUS ABB=ON PLU=ON MALODOR? OR MALODOUR?
L27
                  OR STINK? OR STENCH?
L28
            5701 SEA FILE=HCAPLUS ABB=ON PLU=ON L25(2A)(FOUL? OR BAD
                  OR OFFEN? OR NASTY OR UNPLEAS?)
              43 SEA FILE=HCAPLUS ABB=ON PLU=ON L26 AND L16
L29
              48 SEA FILE=HCAPLUS ABB=ON PLU=ON L26 AND L17
L30
L31
              51 SEA FILE=HCAPLUS ABB=ON PLU=ON L26 AND L20
             51 SEA FILE=HCAPLUS ABB=ON PLU=ON (L29 OR L30 OR L31)
1 SEA FILE=HCAPLUS ABB=ON PLU=ON L1 AND L16
1 SEA FILE=HCAPLUS ABB=ON PLU=ON L1 AND L17
L32
L34
L35
               1 SEA FILE=HCAPLUS ABB=ON PLU=ON L1 AND L20
L36
L37
               1 SEA FILE=HCAPLUS ABB=ON PLU=ON (L34 OR L35 OR L36)
L38
           46462 SEA FILE=HCAPLUS ABB=ON PLU=ON L16 OR L17 OR L20
            3258 SEA FILE=HCAPLUS ABB=ON PLU=ON L38 AND L21
9 SEA FILE=HCAPLUS ABB=ON PLU=ON L39 AND L27
3 SEA FILE=HCAPLUS ABB=ON PLU=ON L39 AND L28
L39
L43
L44
              12 SEA FILE=HCAPLUS ABB=ON PLU=ON L43 OR L44
L45
            3851 SEA FILE=HCAPLUS ABB=ON PLU=ON (AIR OR FABRIC) (2A) FRE
L47
                  SH?
         2 SEA FILE=HCAPLUS ABB=ON PLU=ON L14 AND L38 AND L47 1301314 SEA FILE=HCAPLUS ABB=ON PLU=ON SOLID? OR SEMISOLID?
1.48
L49
                  OR SEMI (A) SOLID?
1.50
           84341 SEA FILE=HCAPLUS ABB=ON PLU=ON SURFAC? (2A) TREAT?
L51
            3085 SEA FILE=HCAPLUS ABB=ON PLU=ON L49(L)L50
L52
             338 SEA FILE=HCAPLUS ABB=ON PLU=ON L51 AND L21
L53
                2 SEA FILE=HCAPLUS ABB=ON PLU=ON L52 AND (L27 OR L28)
                  OUE ABB=ON PLU=ON PARTICL? OR MICROPARTICL? OR PARTI
L55
                  CULAT? OR DUST? OR GRIT? OR GRAIN# OR GRANUL? OR POWDER
                  ? OR SOOT? OR SMUT? OR FINES# OR PRILL? OR FLAKE# OR PE
```

```
LLET? OR BB#
           11659 SEA FILE=HCAPLUS ABB=ON PLU=ON L50(L)L55
L57
            1245 SEA FILE=HCAPLUS ABB=ON PLU=ON L57 AND L21
L58
L59
              1 SEA FILE=HCAPLUS ABB=ON PLU=ON L58 AND L37
            75091 SEA FILE=HCAPLUS ABB=ON PLU=ON L55(3A) (POLYM? OR
L60
                  HOMOPOLY? OR COPOLYM? OR (HOMO OR CO) (A) POLYM?)
           9062 SEA FILE=HCAPLUS ABB=ON PLU=ON L60 AND L21
40991 SEA FILE=HCAPLUS ABB=ON PLU=ON L49(3A) (POLYM? OR
L61
L62
                  HOMOPOLY? OR COPOLYM? OR (HOMO OR CO) (A) POLYM?)
           49706 SEA FILE=HCAPLUS ABB=ON PLU=ON L61 OR L62
1643 SEA FILE=HCAPLUS ABB=ON PLU=ON (V OR VOL OR VOLUM?)(2
L63
L64
                  A) (AVE OR AVERAG?) (2A) (DIA OR DIAM OR DIAMETER? OR
                  DIAMETRE? OR RADIUS OR RADII)
          50 SEA FILE=HCAPLUS ABB=ON PLU=ON L64 AND L63
728605 SEA FILE=HCAPLUS ABB=ON PLU=ON MICRON? OR MICROMET?
L65
1.66
                  OR MICRO(A) (METER? OR METRE?) OR M(A) (M OR METER?
                  OR METRE?)
          32 SEA FILE=HCAPLUS ABB=ON PLU=ON L65 AND L66
1 SEA FILE=HCAPLUS ABB=ON PLU=ON L67 AND L50
672822 SEA FILE=HCAPLUS ABB=ON PLU=ON MU#(A) (M OR METER? OR
L67
L68
L69
                  METRE?)
L70
               32 SEA FILE=HCAPLUS ABB=ON PLU=ON L69 AND L65
           10891 SEA FILE=HCAPLUS ABB=ON PLU=ON FREE(A)(V OR VOL OR
L72
                  VOLUM?)
                1 SEA FILE=HCAPLUS ABB=ON PLU=ON L72 AND L65
L75
              115 SEA FILE=HCAPLUS ABB=ON PLU=ON L32 OR L45 OR L48 OR
L76
                 L53 OR L59 OR L65 OR L67 OR L68 OR L70 OR L75
          113354 SEA FILE=HCAPLUS ABB=ON PLU=ON DETERG?/SC,SX
L77
             10 SEA FILE=HCAPLUS ABB=ON PLU=ON L77 AND L76
1 SEA FILE=HCAPLUS ABB=ON PLU=ON L1 AND L78
105 SEA FILE=HCAPLUS ABB=ON PLU=ON L76 NOT L78
L78
L79
L80
           36242 SEA FILE=HCAPLUS ABB=ON PLU=ON VISCOELAS? OR
T.81
                  VISCO(A) ELAST?
          2 SEA FILE=HCAPLUS ABB=ON PLU=ON L76 AND L81
11 SEA FILE=HCAPLUS ABB=ON PLU=ON L78 OR L79 OR L83
118668 SEA FILE=HCAPLUS ABB=ON PLU=ON SURFACTANT?/CT
L83
L84
L86
               10 SEA FILE=HCAPLUS ABB=ON PLU=ON L86 AND L80
1.87
                  QUE ABB=ON PLU=ON INHIBIT? OR HINDER? OR IMPED? OR A
L88
                  RREST? OR REDUC? OR REDN# OR RESIST? OR SUPPRESS? OR RE
                  TARD? OR PROHIBIT? OR PREVENT? OR BLOCK? OR ELIMINAT? O
                  R LESS? OR ABAT? OR DEPRESS? OR DIMINISH? OR CURTAIL? O
                  R ABSEN? OR REMOV?
            3333 SEA FILE=HCAPLUS ABB=ON PLU=ON L88(3A)(L27 OR L28)
L89
               61 SEA FILE=HCAPLUS ABB=ON PLU=ON L89 AND L86 AND (L77
L90
                  OR L21)
               20 SEA FILE=HCAPLUS ABB=ON PLU=ON L90 AND AQUEOUS?
40 SEA FILE=HCAPLUS ABB=ON PLU=ON L91 OR L87 OR L84
L91
L92
               9 SEA FILE=HCAPLUS ABB=ON PLU=ON L92 AND L38
L93
L94
             67 SEA FILE=HCAPLUS ABB=ON PLU=ON L76 AND L38
               6 SEA FILE=HCAPLUS ABB=ON PLU=ON L94 AND L77
L95
               40 SEA FILE=HCAPLUS ABB=ON PLU=ON L92 OR L93 OR L95
2 SEA FILE=HCAPLUS ABB=ON PLU=ON L15 AND L76
1.96
1.97
               40 SEA FILE=HCAPLUS ABB=ON PLU=ON L96 OR L97
L98
           64132 SEA FILE=HCAPLUS ABB=ON PLU=ON L7
1.99
          143773 SEA FILE=HCAPLUS ABB=ON PLU=ON L8
L100
L101
               23 SEA FILE=HCAPLUS ABB=ON PLU=ON L76 AND (L99 OR L100)
L102
                1 SEA FILE=HCAPLUS ABB=ON PLU=ON L90 AND (L99 OR L100)
               58 SEA FILE=HCAPLUS ABB=ON PLU=ON L98 OR L101 OR L102
1.103
L104
          108479 SEA FILE=HCAPLUS ABB=ON PLU=ON L9
           61942 SEA FILE=HCAPLUS ABB=ON PLU=ON L10
L105
L106
          280201 SEA FILE=HCAPLUS ABB=ON PLU=ON L11
          416802 SEA FILE=HCAPLUS ABB=ON PLU=ON (L104 OR L105 OR
L107
                  L106) OR ?STYRENE
               49 SEA FILE=HCAPLUS ABB=ON PLU=ON L107 AND L76
L108
```

```
6 SEA FILE=HCAPLUS ABB=ON PLU=ON L108 AND L77
16 SEA FILE=HCAPLUS ABB=ON PLU=ON L108 AND AQUEOUS?
1.109
L110
          10026 SEA FILE=HCAPLUS ABB=ON PLU=ON L12
L111
          32484 SEA FILE=HCAPLUS ABB=ON PLU=ON L13
1.112
          36584 SEA FILE=HCAPLUS ABB=ON PLU=ON ETHYL(A)CELLULOSE OR
L113
                ETHYLCELLULOSE OR L111 OR L112
              3 SEA FILE=HCAPLUS ABB=ON PLU=ON
                                                  L113 AND L76
T.114
             11 SEA FILE=HCAPLUS ABB=ON PLU=ON L113 AND L89
L115
           2590 SEA FILE=HCAPLUS ABB=ON PLU=ON L113 AND L21
L116
L117
              4 SEA FILE=HCAPLUS ABB=ON PLU=ON L116 AND L89
           2602 SEA FILE=HCAPLUS ABB=ON PLU=ON L113 AND (L21 OR L47)
L119
            480 SEA FILE=HCAPLUS ABB=ON PLU=ON L119 AND L77
1 SEA FILE=HCAPLUS ABB=ON PLU=ON L120 AND L52
L120
L121
              3 SEA FILE=HCAPLUS ABB=ON PLU=ON L113 AND L52
L122
             13 SEA FILE=HCAPLUS ABB=ON PLU=ON L113 AND L51
L123
             85 SEA FILE=HCAPLUS ABB=ON PLU=ON L103 OR L109 OR L110
L124
                OR L114 OR L115 OR L117 OR (L121 OR L122 OR L123)
             21 SEA FILE=HCAPLUS ABB=ON PLU=ON L124 AND L77
L125
             64 SEA FILE=HCAPLUS ABB=ON PLU=ON L124 AND (L21 OR L52
L126
                OR L65)
L127
             64 SEA FILE=HCAPLUS ABB=ON PLU=ON L125 OR L126
             59 SEA FILE=HCAPLUS ABB=ON PLU=ON L127 AND (L21 OR L47)
L128
             10 SEA FILE=HCAPLUS ABB=ON PLU=ON L128 AND L38
L129
             49 SEA FILE=HCAPLUS ABB=ON PLU=ON L128 NOT L129
L130
             16 SEA FILE=HCAPLUS ABB=ON PLU=ON L130 AND (L99 OR
L131
                L100)
             22 SEA FILE=HCAPLUS ABB=ON PLU=ON L130 AND L107
1.132
             4 SEA FILE=HCAPLUS ABB=ON
                                          PLU=ON L130 AND L113
L133
             39 SEA FILE=HCAPLUS ABB=ON PLU=ON L129 OR L131 OR L132
L134
                OR 1.133
L136
             20 SEA FILE=HCAPLUS ABB=ON PLU=ON L128 NOT L134
```

=> d l136 1-20 ibib abs hitstr hitind

L136 ANSWER 1 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:139318 HCAPLUS

DOCUMENT NUMBER: 140:183329

TITLE: Ink compositions with good stability and

ink-jet printing method

ink-jet printing method

INVENTOR(S): Ishizuka, Takahiro; Ikeda, Kenji PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 51 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004051892	A2	20040219	JP 2002-214239	2002
				0723
PRIORITY APPLN. INFO.:			JP 2002-214239	
				2002
				0723

```
OTHER SOURCE(S): MARPAT 140:183329
```

AB Title aqueous compns. comprise oil-soluble dye-containing coloring fine particle dispersions and petroleum sulfonates. Thus, 2-carboxyethyl acrylate-Bu methacrylate copolymer 1.4, oil-soluble dye 0.6, and sodium 4-octadecylbenzene sulfonate 0.3 parts, and 2

M sodium hydroxide were mixed to give 13.3%-solids coloring fine particle dispersion with average volume particle diameter 80 nm, 50 parts of which was mixed with diethylene glycol 8, tetraethylene glycol monobutyl ether 2, glycerin 5, diethanolamine 1, and polyethylene glycol 2-butyloctanoate 2 parts, and water to give an ink with good stability and printability.

IC

ICM C09D011-00 ICS B41J002-01; B41M005-00; C09B067-20; C09B067-46

42-12 (Coatings, Inks, and Related Products)

ink compn stability jet printing; oil soluble dye acrylic ST copolymer coloring particle ink compn

Sulfonic acids, uses IT

RL: MOA (Modifier or additive use); USES (Uses) (salts, surfactants; ink compns. with good stability and ink-jet printing method)

TΤ Surfactants

> (sulfonate-containing; ink compns. with good stability and ink-jet printing method)

ΤТ 39412-55-0, Petronate HL 63952-44-3, Petronate L 109027-47-6 RL: MOA (Modifier or additive use); USES (Uses) (surfactant; ink compns. with good stability and ink-jet printing method)

L136 ANSWER 2 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:139317 HCAPLUS

DOCUMENT NUMBER: 140:183328

TITLE: Ink compositions with good dischargeability

and ink-jet printing method Ishizuka, Takahiro; Ikeda, Kenji Fuji Photo Film Co., Ltd., Japan

PATENT ASSIGNEE(S): Jpn. Kokai Tokkyo Koho, 50 pp. SOURCE:

CODEN: JKXXAF DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

INVENTOR(S):

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004051891	A2	20040219	JP 2002-214238	
				2002
				0723
PRIORITY APPLN. INFO.:			JP 2002-214238	
				2002
				0723

- AB Title aqueous compns. comprise oil-soluble dve-containing coloring fine particle dispersions, water soluble polymers, hydrophilic organic solvents, and surfactants. Thus, mercaptosuccinic acid-containing iso-Bu methacrylate-Bu acrylate copolymer 1.5, oil-soluble magenta dye 0.5, THF 4, and tert-butanol 6 parts, and 2 M sodium hydroxide were heated at 70° and emulsified to give 16%-solids coloring fine particle dispersion with average volume particle diameter 22 nm, 50 parts of which was mixed with diethylene glycol 8, tetraethylene glycol monobutyl ether 2, glycerin 5, diethanolamine 1, polyethylene glycol butyloctanoate 1, and polyethylene oxide 0.02 parts, and water to give an ink showing good printability, water, light, ozone, and scratch resistance, and no paper dependency.
- IC
- ICM C09D011-00 ICS B41J002-01; B41M005-00
- 42-12 (Coatings, Inks, and Related Products) CC
- ink compn dischargeability jet printing; oil soluble magenta dye

```
acrylic copolymer pigment particle ink
```

IT Ink-jet printing

Surfactants

(ink compns. with good dischargeability)

IT 443873-90-3

RL: MOA (Modifier or additive use); USES (Uses)

(surfactant; ink compns. with good dischargeability)

L136 ANSWER 3 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2004:18629 HCAPLUS

DOCUMENT NUMBER:

140:61008

TITLE:

Color-safe fabric wrinkle removing and refreshing composition, and application

INVENTOR(S):

Kelley, Thomas; Gwilliam, Daniel

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S. Pat. Appl. Publ., 7 pp., Cont.-in-part of

U.S. Ser. No. 949,468.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2004004206	A1	20040108	US 2003-609351		
					2003 0630
US 2002079477	A1	20020627	US 2001-949468		2001 0910
PRIORITY APPLN. INFO.:			US 2000-233673P	P	2000 0919
			US 2000-237680P	P	2000 1005
			US 2001-266502P	P	2001 0206
			US 2001-295477P	p	2001 0604
			US 2001-949468	A2	2001 0910

AB The title composition is spray applied on fabrics to de-wrinkle and refresh while protecting colors which leaves no discernable residue. Quality H2O, ≥1 alc.(s), and ≥1 surfactant(s) penetrate the fabric weave. One or more acids lower pH to stabilize sensitive dyes, thus ensuring color-safeness. Alcs. hasten drying and fragrances mask alc. odor and help consumers identify the product. Mech. action(s) by the user enhances wrinkle removal or imparts shape. Optional malodor-eliminating compds. keep fabrics fresh longer, or refresh malodorous garments. An optional quaternary ammonium compound reduces static cling but does not significantly increase residues. The composition de-wrinkles com. fabrics, and clothing from casual to fine, spray applied using a pre-compression sprayer. The composition is environmentally friendly,

```
safe for use on all types of fabrics, and safe for use at home or \ensuremath{\mathsf{com}}.
```

IC ICM D06M010-00

INCL 252008910; 038144000; 427393200

CC 40-9 (Textiles and Fibers)

IT Creaseproofing

(agents; color-safe, fast-drying, aqueous wrinkle

relaxing and refreshing composition spray-applied on casual to fine clothing and fabrics)

IT Clothing

Perfumes

Surfactants

Textiles

(color-safe, fast-drying, aqueous wrinkle relaxing and refreshing composition spray-applied on casual to fine clothing and fabrics)

IT Acids, uses

RL: TEM (Technical or engineered material use); USES (Uses)
(color-safe, fast-drying, aqueous wrinkle relaxing and
refreshing composition spray-applied on casual to fine clothing and
fabrics)

IT Alcohols, uses

RL: TEM (Technical or engineered material use); USES (Uses) (ethoxylated; color-safe, fast-drying, aqueous wrinkle relaxing and refreshing composition spray-applied on casual to fine clothing and fabrics)

IT 64-17-5, Ethanol, uses 64-19-7, Glacial acetic acid, uses 67-63-0, Isopropanol, uses 71-23-8, Propanol, uses 77-92-9, Citric acid, uses 79-14-1, Hydroxy acetic acid, uses 144-62-7, Oxalic acid, uses 526-83-0 5329-14-6, Sulfamic acid 7664-38-2, Phosphoric acid, uses 7664-93-9, Sulfuric acid, uses RL: TEM (Technical or engineered material use); USES (Uses) (color-safe, fast-drying, aqueous wrinkle relaxing and refreshing composition spray-applied on casual to fine clothing and fabrics)

L136 ANSWER 4 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:169979 HCAPLUS

DOCUMENT NUMBER: 138:209443

TITLE: Foul air eliminator

INVENTOR(S): Parkhurst, Stephen L.; Osborn, Morey E.

PATENT ASSIGNEE(S): SL Parkhurst Corporation, USA

SOURCE: U.S., 16 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6528014	B1	20030304	US 2000-661109	
				2000
				0913
US 2003082082	A1	20030501	US 2002-65537	
				2002
				1028
US 6749805	B2	20040615		
US 2005008544	A1	20050113	US 2004-848948	
				2004
				0519
PRIORITY APPLN. INFO.:			US 1999-153764P P	
				1999
				0913

US 2000-661109

B1

2000 0913

```
US 2002-65537
                                                                  A1
                                                                     2002
                                                                     1028
     A converter for transforming malodorous components of foul air
AB
     comprises a porous layer having an oxidizing agent and an
     aqueous solution of a promoter. The promoter is preferably a
     water-soluble ethylene oxide or propylene oxide adduct. The layer is
     typically used in a gas-handling system to eliminate the foul air
     from a toilet or a bedpan. The layer can be used alone or with a
     second layer of activated charcoal. A Lewis acid and/or a Lewis
     base can be also used with the converter.
     ICM A61L009-00
TC
INCL 422005000; 424076100; 422122000
     59-6 (Air Pollution and Industrial Hygiene)
     Section cross-reference(s): 47
ST
     malodor removal air purifn app toilet bedpan
     operating room; flatus deodorization app toilet bedpan
TΤ
     Charcoal
     RL: NUU (Other use, unclassified); USES (Uses)
        (activated, adsorber; foul air eliminator for
        removing malodors from toilets, bedpans,
        operating rooms or the like)
IT
     Apparatus
        (blowers; foul air eliminator for removing
        malodors from toilets, bedpans, operating rooms or the
        like)
     Air purification
IT
        (deodorization; foul air eliminator for
        removing malodors from toilets, bedpans,
        operating rooms or the like)
IT
     Air purification apparatus
     Toilets
        (foul air eliminator for removing
        malodors from toilets, bedpans, operating rooms or the
        like)
IT
     Lewis acids
     Lewis bases
     RL: CPS (Chemical process); PEP (Physical, engineering or chemical
     process); RCT (Reactant); PROC (Process); RACT (Reactant or
     reagent)
        (foul air eliminator for removing
        malodors from toilets, bedpans, operating rooms or the
        likel
IT
     Surfactants
        (nonionic; foul air eliminator for removing
        malodors from toilets, bedpans, operating rooms or the
        like)
IT
    Mats
        (polypropylene; foul air eliminator for
        removing malodors from toilets, bedpans,
        operating rooms or the like)
     77-92-9, Citric acid, reactions
RL: CPS (Chemical process); PEP (Physical, engineering or chemical
IT
     process); RCT (Reactant); PROC (Process); RACT (Reactant or
     reagent)
        (as Lewis acid; foul air eliminator for
        removing malodors from toilets, bedpans,
        operating rooms or the like)
IT
     144-55-8, Sodium bicarbonate, reactions
                                              584-08-7, Potassium
     carbonate
     RL: CPS (Chemical process); PEP (Physical, engineering or chemical
```

```
process); RCT (Reactant); PROC (Process); RACT (Reactant or
     reagent)
        (as Lewis base; foul air eliminator for
        removing malodors from toilets, bedpans,
        operating rooms or the like)
     9003-07-0, Polypropylene
IΤ
     RL: NUU (Other use, unclassified); USES (Uses)
        (fibrous mat material; foul air eliminator for
        removing malodors from toilets, bedpans,
        operating rooms or the like)
     1305-78-8, Calcium oxide, reactions 2782-57-2,
     Dichloroisocyanuric acid 2893-78-9, Sodium dichloroisocyanurate
    7681-52-9, Sodium hypochlorite 7722-64-7, Potassium permanganate RL: CPS (Chemical process); PEP (Physical, engineering or chemical
     process); RCT (Reactant); PROC (Process); RACT (Reactant or
     reagent)
        (oxidizer; foul air eliminator for removing
        malodors from toilets, bedpans, operating rooms or the
        like)
     9003-20-7, Polyvinyl acetate
TT
     RL: NUU (Other use, unclassified); USES (Uses)
        (partially hydrolyzed; housing material; foul air
        eliminator for removing malodors
        from toilets, bedpans, operating rooms or the like)
IT
     7631-86-9, Silica, uses 9002-86-2, PVC
    RL: NUU (Other use, unclassified); USES (Uses)
        (support material; foul air eliminator for
        removing malodors from toilets, bedpans,
        operating rooms or the like)
REFERENCE COUNT:
                               THERE ARE 11 CITED REFERENCES AVAILABLE
                        11
                               FOR THIS RECORD. ALL CITATIONS AVAILABLE
                               IN THE RE FORMAT
L136 ANSWER 5 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:56333 HCAPLUS
DOCUMENT NUMBER:
                         138:123539
TITLE:
                        Adhesive removers for floor materials and
                        removing process therewith
INVENTOR(S):
                        Takaoka, Hideki
                        Toyo Linoleum Co., Ltd., Japan
PATENT ASSIGNEE(S):
SOURCE:
                         Jpn. Kokai Tokkyo Koho, 8 pp.
                        CODEN: JKXXAF
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                         Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
    PATENT NO. KIND DATE
                                          APPLICATION NO.
                                                                   DATE
                               -----
    JP 2003020451
                   A2
                                20030124 JP 2001-209835
                                                                   2001
                                                                   0710
PRIORITY APPLN. INFO.:
                                           JP 2001-209835
                                                                   2001
                                                                   0710
    Adhesives remained on floor materials (e.g., concretes, mortar,
    woods) after tile carpet peeling are easily removed by removers
    comprising solvents (alkyl glycol ether and/or terpenes and
```

woods) after tile carpet peeling are easily removed by removers comprising solvents (alkyl glycol ether and/or terpenes and optionally aqueous alcs.), surfactants, and N-containing organic alkali compds. The removers have no strong alkali compds. or volatile solvents and show no offensive odors and less hand chapping. Thus, GA Cement (acrylic adhesive) left on a slate plate (JIS A 5403) after peeling a tile carpet therefrom was fully removed by a remover

```
comprising limonene, a polyoxyethylene alkyl ether, dioctyl sodium
     sulfosuccinate, and monoethanolamine.
     ICM C09J005-00
IC
     38-3 (Plastics Fabrication and Uses)
CC
     Section cross-reference(s): 46
     floor adhesive remover limonene polyoxyethylene ether; octyl
ST
     sodium sulfosuccinate surfactant adhesive remover;
     terpene solvent adhesive remover hand chapping free
     Acrylic polymers, miscellaneous
TT
     RL: MSC (Miscellaneous)
        (adhesives; hand chapping- or offensive odor
        -free adhesive removers for floor materials)
IT
     Polyoxyalkylenes, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (ethers, solvents; hand chapping- or offensive
        odor-free adhesive removers for floor
        materials)
IT
     Alcohols, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (ethoxylated, surfactants; hand chapping- or
        offensive odor-free adhesive removers
        for floor materials)
ΙT
     Surfactants
        (hand chapping- or offensive odor-free
        adhesive removers for floor materials)
     Polyoxyalkylenes, uses
TΤ
     RL: TEM (Technical or engineered material use); USES (Uses)
        (monoalkyl ether, surfactants; hand chapping- or
        offensive odor-free adhesive removers
        for floor materials)
IΤ
     Bases, uses
     RL: MOA (Modifier or additive use); TEM (Technical or engineered
     material use); USES (Uses)
        (organic, nitrogen-containing; hand chapping- or offensive
        odor-free adhesive removers for floor
        materials)
IT
     Adhesives
        (peelable, removers for; hand chapping- or offensive
        odor-free adhesive removers for floor
        materials)
IT
     Terpenes, uses
     Turpentine oil
     RL: TEM (Technical or engineered material use); USES (Uses)
        (solvents; hand chapping- or offensive odor
        -free adhesive removers for floor materials)
IT
     488836-18-6, Dipentene T
     RL: TEM (Technical or engineered material use); USES (Uses)
        (Dipentene T, solvents; hand chapping- or offensive
        odor-free adhesive removers for floor
        materials)
ΙT
     488836-40-4, GA Cement
     RL: MSC (Miscellaneous)
        (GA Cement, adhesives; hand chapping- or offensive
        odor-free adhesive removers for floor
        materials)
                                        111-42-2, Diethanolamine, uses
ΙT
     102-71-6, Triethanolamine, uses
     141-43-5, Monoethanolamine, uses
     RL: MOA (Modifier or additive use); TEM (Technical or engineered
     material use); USES (Uses)
        (alkali compds.; hand chapping- or offensive
        odor-free adhesive removers for floor
        materials)
     67-56-1, Methanol, uses 67-63-0, Isopropanol, uses p-Menthane 111-90-0, Carbitol 111-96-6, Diglyme
TΤ
                                                             112-34-5,
     Butyl carbitol 138-86-3, Limonene 1329-99-3, p-Menthadiene
     RL: TEM (Technical or engineered material use); USES (Uses)
```

(solvents; hand chapping- or offensive odor -free adhesive removers for floor materials) IT 577-11-7, Dioctyl sodium sulfosuccinate 25322-68-3D, Polyethylene glycol, monoalkyl ether RL: TEM (Technical or engineered material use); USES (Uses) (surfactants; hand chapping- or offensive odor-free adhesive removers for floor materials)

L136 ANSWER 6 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2002:813969 HCAPLUS

DOCUMENT NUMBER:

137:329269

TITLE:

Composition and method for reducing odor and

disinfecting

KIND DATE

INVENTOR(S):

Hernandez, Pablo M.; Kron, Ryan E.; Wada, Mari

ADDITCATION NO

DATE

PATENT ASSIGNEE(S):

Johnsondiversey, Inc., USA PCT Int. Appl., 18 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION: DATENT NO

PA'	rent :	NO.			KIN		DATE		•	APPL	ICAT	ION :	NO.		DATE
WO	2002	- 0831	89		Al		2002	1024	1	WO 2	002-	US11	759		2002
															0412
	W:	CH, GB,	CN, GD,	CO, GE,	CR, GH,	CU, GM,	AU, CZ, HR, LR,	DE, HU,	DK, ID,	DM,	DZ, IN,	EC, IS,	EE, JP,	ES, KE,	FI, KG,
		MN, SG,	MW, SI,	MX, SK,	MZ, SL,	NO,	NZ, TM,	OM, TN,	PH, TR,	PL, TT,	PT, TZ,	RO, UA,	RU, UG,	SD, US,	SE, UZ,
	RW:	GH, BE, NL,	GM, CH,	KE, CY, SE,	LS, DE, TR,	MW, DK, BF,	MZ, ES, BJ,	SD, FI,	SL, FR,	SZ, GB,	TZ, GR,	UG, IE,	ZM, IT,	ZW, LU,	AT, MC,
CA	2444		PIK,		AA		2002	1024		CA 2	002-	2444	010		
110	2003	0443	0 0		λ1		2003	0206	1	וופ ס	002-	1 2 2 2 2	90		2002 0412
03	2003	0443	03		AI		2003	0300	•	05 2	002-	1222	30		2002 0412
EP	1379	286			A1		2004	0114	1	EP 2	002-	7238	55		2002 0412
BR	R: 2002	MC,	PT,	IE,	SI,	LT,	ES, LV, 2004	FI,	RO,	MK,	CY,	AL,		NL,	
an v					_						•••				2002 0412
CN	1512	896			А		2004	0714	(CN 2	002-1	8082	98		2002 0412
' JP	2004	5358	49		Т2		2004	1202	,	JP 2	002-	5809	90		2002
PRIORITY	APPI	LN.	INFO	.:					τ	US 2	001-2	2840'	72P]	0412 2001 0416
									Ţ	WO 2	002-τ	JS11	759	ī	V 2002

0412

```
The present invention relates to compns. and methods for
AB
     controlling malodor on surfaces and particularly tobacco smoke on
     and in fabrics. The compns. of the present invention comprise
     aldehyde-containing fragrance components, nonionic surfactant
     and an aqueous vehicle. Optionally, addnl. solubilizers, odor control components and preservatives can be included.
     compns. of the invention can be prepared as stable, gel-free, clear
     concs. and diluted for use. If prepared as a concentrate, the concentrate is
     diluted with water to a ready to use concentration and sprayed on the
     surface to be deodorized. Generally the malodors are
     significantly reduced in about 5 min or less. The
     compns. of the invention are particularly effective against smoke
     odors and demonstrate the ability to reduce these odors for
     relatively long periods of time. Selected amine disinfectant
     compds. can be included in the compns. to provide disinfecting
     properties.
```

IC ICM A61L009-01

CC 62-4 (Essential Oils and Cosmetics)

ST odor disinfection aldehyde fragrance surfactant tobacco

IT Surfactants

(nonionic; composition and method for reducing odor and disinfecting)

REFERENCE COUNT:

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L136 ANSWER 7 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:730324 HCAPLUS

DOCUMENT NUMBER: 137:249524

TITLE: Method and product for eliminating

malodors

INVENTOR(S): Ochomogo, Maria G.; Adair, Martha J.; Ali,

Sheila E.; Finn, Leslie E.; Peterson, David; Piche, Gregory M.; Van Buskirk, Gregory

ASSIGNEE(S): The Clorox Company, USA

PATENT ASSIGNEE(S): SOURCE:

U.S., 9 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	PATENT NO.		DATE	APPLICATION NO.	DATE
US 6454876		B1	20020924	US 1999-469576	
					1999
					1222
PRIORITY APPLN.	INFO.:			US 1999-469576	
					1999
					1222

AB The title method and product (preferably spray applied) for mitigating or eliminating malodor(s) is an aqueous liquid deodorizing composition which contains .apprx.0.1-3% water-soluble/dispersible polymer, .apprx.0.01-5% fragrance, .apprx.1-15% water-soluble/dispersible volatile solvent, 0.01-1% surfactant, and the remainder H2O. A general example aerosol formulation contained propellant 27.5, Carboset polymer 2.00, solvent 8.0, corrosion inhibitors 1.9, nonionic surfactant 0.5%, and water.

IC ICM B08B003-04

ICS C11D003-37; C11D003-43

```
INCL 134042000
    46-4 (Surface Active Agents and Detergents)
ST
     aq liq deodorizing spray; smoke deodorizing spray
TΨ
     Textiles
        (acrylic-cotton; liquid containing water-soluble polymer, fragrance,
        surfactant, and aqueous solvent for removing
        odors on fabric and soft surfaces)
IT
     Textiles
        (cotton-polyester; liquid containing water-soluble polymer, fragrance,
        surfactant, and aqueous solvent for removing
        odors on fabric and soft surfaces)
IT
     Perfumes
       Surfactants
        (liquid containing water-soluble polymer, fragrance, surfactant
        , and aqueous solvent for removing odors on fabric and
        soft surfaces)
ΤT
    Deodorants
        (refresheners and; liquid containing water-soluble polymer, fragrance,
        surfactant, and aqueous solvent for removing
        odors on fabric and soft surfaces)
    25311-71-1, Amaze 221627-90-3, Balance 47
                                                   274681-35-5, Balance
TΨ
    CR 361553-22-2, Balance 0/55 433924-03-9, Amphomer HC
     461419-76-1, Flexam 130
    RL: POF (Polymer in formulation); TEM (Technical or engineered
    material use); USES (Uses)
        (liquid containing water-soluble polymer, fragrance, surfactant
        , and aqueous solvent for removing odors on fabric and
        soft surfaces)
REFERENCE COUNT:
                         31
                              THERE ARE 31 CITED REFERENCES AVAILABLE
                               FOR THIS RECORD. ALL CITATIONS AVAILABLE
                              IN THE RE FORMAT
L136 ANSWER 8 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                        2002:503326 HCAPLUS
DOCUMENT NUMBER:
                        137:67887
TITLE:
                        Hair bleach composition and hair dye
                         composition
INVENTOR(S):
                        Matsuo, Takashi; Miyabe, Hajime; Shibata,
                        Yutaka; Ito, Yoshiaki; Monda, Keiji; Misu,
                        Daisuke
PATENT ASSIGNEE(S):
                        Kao Corporation, Japan
                        Eur. Pat. Appl., 18 pp.
SOURCE:
                        CODEN: EPXXDW
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
    PATENT NO.
                                          APPLICATION NO.
                        KIND DATE
                                                                   DATE
    -----
    EP 1219285
                         A2
                               20020703
                                           EP 2001-130241
                                                                   2001
                                                                   1219
    EP 1219285
                         A3
                               20040728
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
            MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                          JP 2000-400808
    JP 2002193773
                         A2
                               20020710
                                                                   2000
                                                                   1228
```

JP 2000-400875

JP 2000-400876

2000 1228

JP 3638519

JP 3662494

JP 2002193774

JP 2002193770

B2

A2

B2

A2

20050413

20020710

20050622

20020710

TD 2002102771	7.0	20020710	TD 2000 400077		2000 1228
JP 2002193771	A2	20020710	JP 2000-400877		2000 1228
JP 2002201118	A2	20020716	JP 2000-402454		2000 1228
JP 2002226340	A2	20020814	JP 2001-27704		2001 0205
JP 2002265338	A2	20020918	JP 2001-61696		2001
JP 3683505	B2	20050817			0306
US 2002139957	A1	20021003	US 2001-25762		
					2001 1226
US 6916432 .	B2	20050712			
JP 2004010620	A2	20040115	JP 2003-346663		2003 1006
JP 2004131510	A2	20040430	JP 2004-2806		
					2004 0108
JP 2004107359	A2	20040408	JP 2004-3668		
					2004 0109
JP 2004123759	A2	20040422	JP 2004-5430		0109
					2004
JP 2004196812	A2	20040715	JP 2004-26557		0113
51 2004150012	112	20040713	01 2004 20057		2004
JP 2004217672	A2	20040805	JP 2004-110719		0203
UP 200421/6/2	A2	20040005	OF 2004-110/19		2004 0405
PRIORITY APPLN. INFO.:			JP 2000-400808	A	2000
					2000 1228
			JP 2000-400875	A	2000
					1228
			TD 0000 40005		
			JP 2000-400876	A	2000
					1228
			TD 2000 400077	7	
			JP 2000-400877	Α	2000
					1228
			JP 2000-402454	A	
			OF 2000-402434		2000
					1228
			JP 2001-27704	А	
			01 2001 27701	••	2001
					0205
			JP 2001-61696	А	
			11 2001 01000	••	2001
					0306

AB A hair bleach or dye composition is described which, during use,

includes a mixture of a first composition containing an alkali agent and a second composition containing an oxidizing agent. The composition contains (A) an organic solvent having a partition coefficient log P in octanol-water at 25° of 0.3-6 and a mol. weight of 200 or less, in an amount of 1-70 weight%; (B) an organic solvent having a log P of less than 0.3, in an amount of 0-8 weight% and less than that of component (A); (C) an alkali agent, e.g., ammonia, in an amount of 0.1-10 weight%; (D) an oxidizing agent in an amount of 0.1-12 weight% as reduced to H2O2; (E) water in an amount of 20-70 weight%, and further may contain (F) a cationic surfactant in an amount of 0.01-10 weight%. A hair dye composition further comprises (G) an oxidation-type dye intermediate or (H) a direct dye. The composition has a pH of 7.5-12 after mixing of the first composition and the second composition The bleach or dye composition provides less offensive odor, exhibit excellent hair-bleaching power and hair-dyeing power, and exhibit excellent hair-conditioning effect during and after treatment. For example, an oxidation-type hair bleach composition was prepared containing (by weight) first composition - 2-benzyloxyethanol 10%, ethanol 3%, monoethanolamine 6%, oleyl alc. 2%, polyoxyethylene (20) octyl dodecyl ether 18%, polyoxyethylene (9) oleyl ether 6%, polyoxyethylene (3) tridecyl ether 15%, polyethylene glycol 400 8%, liquid paraffin 6%, perfume 0.4%, and water 25.6%; and second composition - 35% aqueous hydrogen peroxide 17%, polyoxyethylene (9) oleyl ether 25%, oleyl alc. 15%, 8-quinolinol sulfate 0.04%, 75% phosphoric acid 0.02%, and water 42.94%. The first composition and the second composition were mixed at a ratio of 1:1.5 (by weight), to thereby prepare a hair bleach composition When used, the composition provided a weak offensive odor and excellent bleach power. ICM A61K007-13

TC ICS A61K007-135

62-3 (Essential Oils and Cosmetics)

ΤТ Surfactants

(cationic; hair bleach and dye prepns. containing hydrophobic solvent, alkali, and oxidizing agent)

L136 ANSWER 9 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2002:487971 HCAPLUS

DOCUMENT NUMBER:

137:48529

TITLE:

Color-safe, fast-drying, aqueous

wrinkle relaxing and reducing composition spray-applied on casual to fine clothing and

fabrics

INVENTOR(S):

Kelley, Thomas F.; Gwilliam, Daniel L.

PATENT ASSIGNEE(S):

SOURCE:

U.S. Pat. Appl. Publ., 6 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE .

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002079477	Al	20020627	US 2001-949468	2001
US 2004004206	A1	20040108	US 2003-609351	0910 2003
PRIORITY APPLN. INFO.:			US 2000-233673P P	0630 2000 0919
			US 2000-237680P P	2000

```
US 2001-266502P P
2001
0206
US 2001-295477P P
2001
0604
US 2001-949468 A2
2001
0910
```

This invention is a wrinkle relaxing and reducing composition that mimics the dewrinkling effects of steam. Quality water is used as the primary fabric relaxant and wrinkle reducer. A surfactant or combination of surfactants super-wets the fabric allowing the water to work. An acid or several acids lower the pH to ensure that composition is color-safe. Optional hydrophilic fragrance(s) mask the alc. odor and helps to identify the product. An alc. or alcs. lower viscosity and hastens the drying process. The mech. action of gently shaking or brushing fabric with free hand or forming fabric just after application of composition further enhances wrinkle elimination or reduction Adding optional odor eliminating compds. and/or optional quaternary ammonium compds. keeps fabrics fresh longer, or refreshes malodorous garments by eliminating odorous compds. and/or reduces static cling, resp., without significantly increasing residues. The composition is applied in any reasonable manner but preferably spray applied using a com. available pre-compression sprayer or aerosol pressure container on fabrics in the home or in a com. setting to relax and reduce wrinkles in casual to fine clothing and/or fabrics, resp. It is color-safe, extremely fast drying, environmentally friendly and safe for use com. and in the home. The invention also includes the application of the composition on a "forgotten load" garment or reusable or individually packaged fabric carrier sheet which is placed in the home dryer to relax and reduce wrinkles in casual to fine clothing in "forgotten" dryer loads and for "bulk" or com. dewrinkling.

IC ICM D06M010-00

INCL 252008810

CC 40-9 (Textiles and Fibers)

IT Creaseproofing

(agents; color-safe, fast-drying, aqueous wrinkle relaxing and reducing composition spray-applied on casual to fine clothing and fabrics)

IT Clothing

Perfumes

Surfactants

Textiles

(color-safe, fast-drying, aqueous wrinkle relaxing and reducing composition spray-applied on casual to fine clothing and fabrics)

IT Acids, uses

RL: TEM (Technical or engineered material use); USES (Uses) (color-safe, fast-drying, aqueous wrinkle relaxing and reducing composition spray-applied on casual to fine clothing and fabrics)

IT Alcohols, uses

RL: TEM (Technical or engineered material use); USES (Uses) (ethoxylated; color-safe, fast-drying, aqueous wrinkle relaxing and reducing composition spray-applied on casual to fine clothing and fabrics)

IT 77-92-9, Citric acid, uses 79-14-1, Hydroxy acetic acid, uses

526-83-0, Tartaric acid 5329-14-6, Sulfamic acid 7664-38-2, Phosphoric acid, uses 7664-93-9, Sulfuric acid, uses RL: TEM (Technical or engineered material use); USES (Uses) (color-safe, fast-drying, aqueous wrinkle relaxing and reducing composition spray-applied on casual to fine clothing and fabrics)

L136 ANSWER 10 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:249980 HCAPLUS

DOCUMENT NUMBER: 136:249357

TITLE: Manufacture of colored leather

INVENTOR(S): Kerner, S. M.; Gorbachev, A. A.; Averkova, V.

I.; Orlova, E. D.

PATENT ASSIGNEE(S): Obshchestvo S Ogranichennoi Otvetstvennost'yu

"GVP Khimmaterialy", Ukraine

SOURCE: Russ., No pp. given

CODEN: RUXXE7

DOCUMENT TYPE: Patent

LANGUAGE: Russian

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2151191	C1	20000620	RU 1999-116217	
				1999
				0802
PRIORITY APPLN. INFO.:			RU 1999-116217	
				1999
				0802

AB The process which eliminates unpleasant odor and reduces dye consumption is based on precipitating basic Cr salts on derma fibers in the form of uncharged complexes, which do not prevent anionic dyes from penetration in the course of dyeing. Cattle offal is subjected to ashing, pickling, tanning with basic Cr salts, dubbing, neutralization, dyeing, greasing, and finishing. The pickling is preceded by treatment with aqueous solution of (NH4) 2SO4 and urea-HCHO resin which is prepared in aqueous alkaline medium containing CaCO3, urotropin and urea. The reaction mixture is heated to reflux, mixed with nonionic surfactant, and prior to use, diluted with 10 parts of H2O.

IC

ICM C14C001-08 45-2 (Industrial Organic Chemicals, Leather, Fats, and Waxes) CC

TΨ Surfactants

(nonionic, urea resin solution component; manufacture of colored leather treated with urea resin containing surfactant before pickling)

L136 ANSWER 11 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:31400 HCAPLUS

DOCUMENT NUMBER: 136:87533

TITLE: Purified polyoxypropylene fatty acid

isopropanolamide surfactants with good storage stability and reduced malodor, production thereof and detergent compositions containing the

surfactants

INVENTOR(S): Ito, Toyofumi; Higuchi, Hiroshi

PATENT ASSIGNEE(S): Kawaken Fine Chemicals Co., Ltd., Japan

SOURCE: PCT Int. Appl., 44 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PA	TENT				KIN		ATE		API	PLICAT	ION 1	10.		DATE
WC	2002	- 0025	10		A1	2	0020	0110	WO	2001-	JP582	21		2001 0704
	RW:	AT, MC,	BE, NL,	CH, PT,	CY, SE,	DE, I	DK,	ES,	KR, SC FI, FF	R, GB,	GR,	·	IT,	
AU	2001	0694	43		A 5	2	0020)114	AU	2001-	69443	3		2001 0704
EP	1298	123			A1	2	0030	0402	EP	2001-	94783	31		2001 0704
пе		MC,	PT,	IE,	FI,	CY,	TR	•	GB, GF		-	·	NL,	SE,
									US					2003 0103
US	2005	1871	35		A1	2	0050	0825	US	2005-	98370)		2005 0405
PRIORIT	Y APP	LN.	INFO	.:					JP	2000-	20685	59	1	2000 0704
									WO	2001-	JP582	21	V	2001 0704
									US	2003-	33209	92	I	2003 0103

OTHER SOURCE(S): MARPAT 136:87533

AB The surfactants are prepared by the addition reaction of a fatty acid isopropanolamide compound (I) with 0.5-10 mol. propylene oxide where the malodor caused by the dehydroxy-cyclization product of the I, i.e., oxazoline compound as a byproduct can be suppressed to <0.1% by heating the product mixture with water or alkali aqueous solution at 50-100°. Detergent formulation containing 0.1-50% the surfactants has good thickening, foaming, emulsification, dispersion and solubilization properties.

IC ICM C07C233-18

ICS C07C233-20; C07C231-12; C07C231-24; C11D001-52

CC 46-3 (Surface Active Agents and Detergents)

ST propoxylated fatty acid isopropanolamide surfactant malodor redn detergent formulation

IT Polyoxyalkylenes, uses

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (fatty amido group-terminated, surfactants; purified polyoxypropylene fatty acid isopropanolamide surfactants with good storage stability and reduced malodor, production thereof and detergent compns. containing surfactants)

IT Amides, uses

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (fatty, alkoxylated, surfactants; purified polyoxypropylene fatty acid isopropanolamide

```
surfactants with good storage stability and
        reduced malodor, production thereof and
        detergent compns. containing surfactants)
TΤ
     Surfactants
        (nonionic; purified polyoxypropylene fatty acid
        isopropanolamide surfactants with good storage
        stability and reduced malodor, production
        thereof and detergent compns. containing
        surfactants)
     Detergents
        (purified polyoxypropylene fatty acid isopropanolamide
        surfactants with good storage stability and
        reduced malodor, production thereof and
        detergent compns. containing surfactants)
     7504-77-0P, 5-Methyl-2-undecyl-2-oxazoline
IT
     RL: IMF (Industrial manufacture); REM (Removal or disposal); PREP
     (Preparation); PROC (Process)
        (byproduct; purified polyoxypropylene fatty acid
        isopropanolamide surfactants with good storage
        stability and reduced malodor, production
        thereof and detergent compns. containing
        surfactants)
TТ
     1310-73-2, Sodium hydroxide, uses
     RL: CAT (Catalyst use); USES (Uses)
        (hydrolysis catalyst for oxazoline compds.; purified
        polyoxypropylene fatty acid isopropanolamide
        surfactants with good storage stability and
        reduced malodor, production thereof and
        detergent compns. containing surfactants)
IT
     142-54-1P, Lauryl monoisopropanolamide
     RL: IMF (Industrial manufacture); RCT (Reactant); PREP
     (Preparation); RACT (Reactant or reagent)
        (intermediate; purified polyoxypropylene fatty acid
        isopropanolamide surfactants with good storage
        stability and reduced malodor, production
        thereof and detergent compns. containing
        surfactants)
TT
     78-96-6, Isopropanolamine
                                  111-82-0, Methyl laurate
                                                              143-07-7,
     Lauric acid, reactions
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reactant for surfactant; purified polyoxypropylene fatty acid isopropanolamide surfactants with good
        storage stability and reduced malodor,
        production thereof and detergent compns. containing
        surfactants)
ΙT
     84170-76-3P
     RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical
     or engineered material use); PREP (Preparation); USES (Uses)
        (surfactant; purified polyoxypropylene fatty acid
        isopropanolamide surfactants with good storage
        stability and reduced malodor, production
        thereof and detergent compns. containing
        surfactants)
REFERENCE COUNT:
                                THERE ARE 4 CITED REFERENCES AVAILABLE
                                FOR THIS RECORD. ALL CITATIONS AVAILABLE
                                IN THE RE FORMAT
L136 ANSWER 12 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         2001:624687 HCAPLUS
DOCUMENT NUMBER:
                         135:361919
TITLE:
                         Reduction of contaminants in wastewater by
                         treatment with an enzyme-surfactant
                         composition
AUTHOR (S):
                         Podella, Carl W.; Sasaki, Shuichi; Krassner,
                         Stuart M.; Piszkiewicz, Dennis
```

CORPORATE SOURCE:

Irvine Developmental and Cell Biology,

SOURCE:

Biological Sciences II, University of California, Irvine, CA, 92697-2300, USA WEF/Purdue Industrial Wastes Conference, Indianapolis, IN, United States, June 27-30, 1999 (1999), 393-411. Water Environment Federation: Alexandria, Va.

CODEN: 69BTI5

DOCUMENT TYPE: LANGUAGE: Conference; (computer optical disk)

English

AB Industry is under constant pressure by municipal wastewater treatment facilities to reduce the concentration of pollutants discharged in their effluent. As the publicly owned treatment works (POTW) approach capacity, they typically transfer much of the burden to industries they serve by requiring installation or expansion of existing pretreatment facilities to ease the pressure on the municipal facility. A Wisconsin-based food processor continually expanded for 20 yr when increased production outstripped the functional capacity of its pretreatment system and brought the POTW to the limits of their plant capacity design. The successful use of enzyme-surfactant compns. to: reduce BOD and total suspended solids (TSS); reduce aeration costs through better O2 transfer; and significantly reduce or eliminate the malodor of wastewater processed by the existing pretreatment facility. Bench tests replicated and confirmed the results. As a result of the enzyme-surfactant treatment program, the food processor could defer the required pretreatment facility expansion for at least 12-15 yr and realize substantial net savings on their wastewater surcharges.

CC 60-2 (Waste Treatment and Disposal)
Section cross-reference(s): 7, 17, 46

ST food processing biol wastewater pretreatment; enzyme surfactant wastewater pretreatment food processing effluent; org compd degrdn enzyme surfactant wastewater pretreatment; odor control enzyme surfactant wastewater pretreatment

IT Wastewater treatment

(biol.; reducing organic compds. and odor associated with food processing wastewater by pretreatment with enzymesurfactant composition)

IT Surfactants

(enzymes and; reducing organic compds. and odor associated with food processing wastewater by pretreatment with enzymesurfactant composition)

IT Wastewater treatment

(enzymic, surfactants and; reducing organic compds. and odor associated with food processing wastewater by pretreatment with enzyme-surfactant composition)

IT Economics

Odor and Odorous substances

(reducing organic compds. and odor associated with food processing wastewater by pretreatment with enzyme-surfactant composition)

IT Organic compounds, processes

RL: BPR (Biological process); BSU (Biological study, unclassified); REM (Removal or disposal); BIOL (Biological study); PROC (Process)

(reducing organic compds. and odor associated with food processing wastewater by pretreatment with enzyme-surfactant composition)

IT Solids

(removal of total suspended; reducing organic compds. and odor associated with food processing wastewater by pretreatment with enzyme-surfactant composition)

IT Biochemical oxygen demand Chemical oxygen demand

(removal of; reducing organic compds. and odor associated with food

```
processing wastewater by pretreatment with enzyme-
surfactant composition)
```

IT Soybean (Glycine max)

(wastewater from processing of; reducing organic compds. and odor associated with food processing wastewater by pretreatment with enzyme-surfactant composition)

Food processing IT

(wastewater from; reducing organic compds. and odor associated with food processing wastewater by pretreatment with enzymesurfactant composition)

7782-44-7, Oxygen, processes

RL: BPR (Biological process); BSU (Biological study, unclassified); OCU (Occurrence, unclassified); REM (Removal or disposal); BIOL (Biological study); OCCU (Occurrence); PROC (Process)

(reducing organic compds. and odor associated with food processing wastewater by pretreatment with enzyme-surfactant composition)

REFERENCE COUNT:

THERE ARE 12 CITED REFERENCES AVAILABLE 12 FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L136 ANSWER 13 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2001:185880 HCAPLUS

DOCUMENT NUMBER:

134:209729

TITLE:

Detergent composition having

granular cyclodextrin

DATE

INVENTOR(S):

Angell, Adrian John Waynforth; France, Paul

APPLICATION NO.

DATE

Amaat

PATENT ASSIGNEE(S):

Procter & Gamble Company, USA

SOURCE: PCT Int. Appl., 42 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

KIND

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.

	INIBNI NO.					KIND DATE				Dill						
						_										
	WO	WO 2001018163				A1		2001	0315	1	WO 2					
																2000
																0821
		W:	AE.	AG.	AL.	AM.	AT.	AT,	AU.	AZ.	BA.	BB.	BG.	BR.	BY.	BZ.
								CZ,	-			•				•
				•		•	•	GD,	•		•	•				-
			•	•	•		•	KR,				•	•	•		-
			•	•	•		•	MN,	•	•	•	•	•	•		•
				•	•		•	SK,	•		•				•	•
				•	•		•	ZA,					-			-
			•	•	02,	V 14 ,	10,	ΔA,	۷,	ы,	AL,	ы,	ico,	RΔ,	ιш,	RO,
		DM.	TJ,		1717	T.C.	MTd	M7	CD	CT	07	m rz	110	75.7	70.000	DE
		RW:		-				MZ,		-						
				-				FI,								
				•	•	BJ,	CF,	CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,
				TD,	TG											
	US	6881	712			В2		2005	0419	1	US 2	002-	8731	6		
																2002
																0301
	US	2005	1432	72		A1		2005	0630	1	US 2	005-	6787	8		
																2005
																0228
PRIOR	RITY	APP	LN.	INFO	. :					1	US 1:	999-	1522	51P	1	P
																1999
																0903
										1	US 1:	999-	1523	Q D	1	P
											JJ 1.				•	•

```
1999
0903
US 1999-152395P P
1999
0903
WO 2000-US22851 A1
2000
0821
US 2002-87316 A3
2002
0301
```

AB A laundry detergent product capable of removing malodor from laundered items during an automatic laundry washing process is characterized by: (a) cyclodextrin granules formed from a mixture of cyclodextrin powder, an inorg. compound (e.g., zeolite) and an aqueous medium, the cyclodextrin granules having a particle size in a range of about 100-1200 μ; (b) a laundry detergent composition including a surfactant, a builder and an enzyme; and (c) the laundry detergent product being adapted to readily dissolve and disperse the cyclodextrin granules into a wash solution when the laundry detergent product is used in the above automatic laundry washing process, and wherein the cyclodextrin, when released into the above wash solution, has an odor loading factor of at least about 50.

IC ICM C11D003-22

ICS C11D017-06; C11D011-00

- CC 46-5 (Surface Active Agents and Detergents)
- ST cyclodextrin zeolite laundry detergent compn
- IT Detergent builders

Surfactants

(composition containing; preparation of **detergent** composition having granular cyclodextrin)

IT Aluminosilicates, uses

Carbonates, uses

Enzymes, uses

Phosphates, uses

Silicates, uses

Sulfates, uses

Zeolites (synthetic), uses

RL: TEM (Technical or engineered material use); USES (Uses) (composition containing; preparation of detergent composition having granular cyclodextrin)

IT Detergents

(laundry, composition containing; preparation of **detergent** composition having granular cyclodextrin)

IT Group IIIA element compounds

RL: TEM (Technical or engineered material use); USES (Uses) (perborates, composition containing; preparation of **detergent** composition having granular cyclodextrin)

IT Particles

(preparation of detergent composition having granular cyclodextrin)

IT 77-92-9, uses 79-10-7D, Acrylic acid, polymers 79-41-4D,
Methacrylic acid, polymers 7631-86-9, Silica, uses 9003-39-8,
Poly(vinylpyrrolidone) 9004-32-4, Carboxylmethylcellulose
9005-25-8, Starch, uses 9045-81-2, Polyvinyl pyridine N-oxide
14807-96-6, Talc, uses 25608-40-6, L-Aspartic acid homopolymer
RL: TEM (Technical or engineered material use); USES (Uses)
(composition containing; preparation of detergent composition having
granular cyclodextrin)

IT 12619-70-4, Cyclodextrin

RL: TEM (Technical or engineered material use); USES (Uses) (preparation of detergent composition having granular cyclodextrin)

REFERENCE COUNT:

4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L136 ANSWER 14 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2000:351406 HCAPLUS

DOCUMENT NUMBER:

132:351944

TITLE:

Spray containing amphoteric material to

reduce malodors

INVENTOR(S):

Frismark, Jan; Kvernheim, Arne Lund; Saastad, Ole Widar; Thomasson, Ronnie; Ulrichsen, Borre

Bengt; Archer, Fred

PATENT ASSIGNEE(S): SOURCE:

Sanodor A/S, Norway PCT Int. Appl., 56 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000029039	A1	20000525	WO 1999-IB1835	1999
MC, NL, PT,	CY, DE SE	, DK, ES,	FI, FR, GB, GR, IE,	1115 IT, LU,
			CA 1999-2351625	1999 1115
EP 1128852				1999 1115
MC, PT, IE, NO 2001002373	FI		GB, GR, IT, LI, LU, NO 2001-2373	NL, SE,
US 6703010	B1	20040309	US 2001-831936	2001 0514
				2001 0514
PRIORITY APPLN. INFO.:			GB 1998-24922	A 1998 1114
			GB 1998-24924	A 1998 1114
			GB 1999-16503	A 1999 0715
			GB 1999-16506	A 1999 0715
			GB 1999-21747	A 1999 0915

```
WO 1999-IB1835
```

1999 1115

AB Powder compns. usable to reduce malodors, and powder formulations from which can be made aqueous spray compns. usable to reduce malodors, each comprise, as a major ingredient, amphoteric material, for example sodium bicarbonate, potassium bicarbonate, or zinc oxide, together with one or more minor ingredients, in particular a drying agent, for example sodium sulfate. Other minor ingredients may be an ammonia-odor/sulfide-odor remover, for example ferrous sulfate or zinc sulfate, and an adsorbent, for example zeolite, in the case of a powder formulation; or a filler, for example potassium chloride, or an organic complexing agent, for example cyclodextrin, or a surfactant, in the case of a stock formulation.

IC ICM A61L009-14

ICS A61L009-01; A01K001-015

CC 59-4 (Air Pollution and Industrial Hygiene)

Section cross-reference(s): 60

IT Zeolites (synthetic), uses

RL: NUU (Other use, unclassified); USES (Uses)

(adsorbents; spray containing amphoteric material to reduce
malodors)

IT Amphoteric materials

Compost

Odor and Odorous substances

Surfactants

Textiles

(spray containing amphoteric material to reduce
malodors)

IT 99-96-7D, alkyl esters

RL: NUU (Other use, unclassified); USES (Uses)

(Paraben, preservative; spray containing amphoteric material to reduce malodors)

IT 7487-88-9, Magnesium sulfate, uses 7757-82-6, Sodium sulfate,

uses 7778-80-5, Potassium sulfate, uses

RL: NUU (Other use, unclassified); USES (Uses)

(drying agent; spray containing amphoteric material to reduce malodors)

IT 7447-40-7, Potassium chloride, uses

RL: NUU (Other use, unclassified); USES (Uses)

(filler; spray containing amphoteric material to reduce
malodors)

IT 12619-70-4, Cyclodextrin

RL: NUU (Other use, unclassified); USES (Uses)

(organic complexing agent; spray containing amphoteric material to reduce malodors)

IT 1003-07-2, Isothiazolinone 3088-27-5D, Hydroxymethylamine,

derivs. 7631-86-9, Silica, uses 98252-04-1

RL: NUU (Other use, unclassified); USES (Uses)

(preservative; spray containing amphoteric material to reduce malodors)

IT 144-55-8, Sodium bicarbonate, uses 298-14-6, Potassium bicarbonate 1314-13-2, Zinc oxide, uses 7720-78-7, Ferrous sulfate 7733-02-0, Zinc sulfate 7786-30-3, Magnesium chloride,

RL: NUU (Other use, unclassified); USES (Uses)

(spray containing amphoteric material to reduce

malodors)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE
FOR THIS RECORD. ALL CITATIONS AVAILABLE
IN THE RE FORMAT

L136 ANSWER 15 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 1999:751875 HCAPLUS

```
DOCUMENT NUMBER:
                         132:4269
TITLE:
                         Method for stabilizing (poly)alkylene glycol
                          compounds and cleaning compositions containing
                          them
INVENTOR(S):
                         Horiquchi, Yasunobu; Okano, Tomomichi
                         Lion Corp., Japan
Jpn. Kokai Tokkyo Koho, 7 pp.
PATENT ASSIGNEE(S):
SOURCE:
                          CODEN: JKXXAF
DOCUMENT TYPE:
                          Patent
LANGUAGE:
                         Japanese
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                                                     DATE
     PATENT NO.
                         KIND
                                 DATE
                                             APPLICATION NO.
                                             -----
                                 -----
     -----
                         ----
     JP 11323386
                          A2
                                 19991126
                                             JP 1998-142356
                                                                     1998
                                                                     0508
PRIORITY APPLN. INFO.:
                                             JP 1998-142356
                                                                     1998
                                                                     0508
ΔR
     The stabilization of (poly)alkylene glycol compds. such as
     surfactants for use in detergents,
     shampoos, etc., can be attained by using radical
     scavengers, light stabilizers or/and active O scavengers, and
     through which, the discoloration of detergents containing
     them can be avoided. Thus, a 60% aqueous solution of a
     polyethylene glycol (mol. weight 1000) had HCHO content 0.1 ppm
     initially and 0.2 ppm after 2 wk at room temperature when containing 0.1%
     methoxyphenol, vs. 0.1 ppm and 77 ppm, resp., in the absence of
     the methoxyphenol.
     ICM C11D001-72
TC
     ICS A61K007-075; A61K007-50; C11D001-83; C11D010-06; C11D017-08
     46-6 (Surface Active Agents and Detergents)
     antioxidant polyethylene glycol detergent compn;
ST
     methoxyphenol stabilizer polyethylene glycol detergent;
     polyalkylene glycol stabilization radical scavenger; oxygen
     scavenger polyalkylene glycol stabilization; discoloration
     prevention polyalkylene glycol stabilization; malodor prevention polyalkylene glycol stabilization;
     shampoo discoloration prevention surfactant
     antioxidant; light stabilizer polyalkylene glycol discoloration
     prevention
ΙT
     Polyoxyalkylenes, uses
     Sulfonates
     RL: PRP (Properties); TEM (Technical or engineered material use);
     USES (Uses)
        (cleaning composition; method for stabilizing (poly)alkylene glycol
        compds. and detergents containing them)
TT
     Betaines
     RL: PRP (Properties); TEM (Technical or engineered material use);
     USES (Uses)
        (coco fatty acid compds., surfactants; method for
        stabilizing (poly)alkylene glycol compds. and
        detergents containing them)
     Fatty acids, uses
     RL: PRP (Properties); TEM (Technical or engineered material use);
     USES (Uses)
        (coco, amidopropylbetaine, surfactants; method for
        stabilizing (poly)alkylene glycol compds. and
        detergents containing them)
TΤ
     Fatty acids, uses
```

RL: PRP (Properties); TEM (Technical or engineered material use);

USES (Uses)

à

```
(coco, sodium salts, cleaning composition; method for stabilizing
         (poly) alkylene glycol compds. and detergents containing
         them)
TΤ
     Antioxidants
       Detergents
     Light stabilizers
     Radical scavengers
     Stabilizing agents
        Surfactants
         (method for stabilizing (poly)alkylene glycol compds. and
        cleaning compns. containing them)
IT
     Discoloration prevention
         (method for stabilizing (poly)alkylene glycol compds. and
         detergents containing them)
     Polyoxyalkylenes, uses
     RL: PRP (Properties); TEM (Technical or engineered material use);
     USES (Uses)
         (surfactants; method for stabilizing (poly)alkylene
        glycol compds. and cleaning compns. containing them)
     98-11-3D, Benzenesulfonic acid, alkyl derivs., sodium salts, uses 98-11-3D, Benzenesulfonic acid, linear alkyl derivs., salts, uses 1462-54-0, N-Lauryl \beta-alanine 4536-30-5, Lauryl ethoxylate
IT
     9004-82-4 9064-14-6, Polypropylene glycol dodecyl ether
     25322-69-4, Polypropylene glycol
     RL: PRP (Properties); TEM (Technical or engineered material use);
     USES (Uses)
         (cleaning composition; method for stabilizing (poly)alkylene glycol
        compds. and detergents containing them)
ΙT
     25322-68-3
     RL: PRP (Properties); TEM (Technical or engineered material use);
     USES (Uses)
         (surfactants; method for stabilizing (poly)alkylene
        glycol compds. and cleaning compns. containing them)
     111-42-2D, Diethanolamine, coco fatty acid amide,
     surfactants 10124-65-9, Potassium laurate 13429-27-1,
     Potassium myristate 32128-65-7, Polyoxyethylene octyldodecyl ether 144649-53-6, N-Lauroyl-N-methyl-\beta-alanine potassium
     salt
     RL: PRP (Properties); TEM (Technical or engineered material use);
     USES (Uses)
         (surfactants; method for stabilizing (poly)alkylene
        glycol compds. and detergents containing them)
     7664-93-9D, Sulfuric acid, esters, Na-salt, uses RL: PRP (Properties); TEM (Technical or engineered material use);
IT
     USES (Uses)
         (t; method for stabilizing (poly)alkylene glycol compds. and
        detergents containing them)
L136 ANSWER 16 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
                          1998:147230 HCAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                           128:221472
TITLE:
                           Odor control compositions comprising
                           \beta-ketoester pro-fragrances
                           Sivik, Mark Robert; Severns, John Cort;
INVENTOR(S):
                           Hartman, Frederick Anthony, Trinh, Toan
PATENT ASSIGNEE(S):
                           Procter & Gamble Company, USA
SOURCE:
                           PCT Int. Appl., 72 pp.
                           CODEN: PIXXD2
DOCUMENT TYPE:
                           Patent
                           English
LANGUAGE:
FAMILY ACC. NUM. COUNT: 10
PATENT INFORMATION:
                           KIND DATE
                                              APPLICATION NO.
                                                                         DATE
     PATENT NO.
```

```
WO 9807455
                           A1
                                 19980226
                                              WO 1997-US14614
                                                                      1997
                                                                      0819
         W: BR, CA, CN, CZ, JP, MX, US
         RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC,
             NL, PT, SE
     CA 2293395
                                 19980226
                                              CA 1997-2293395
                                                                      1997
                                                                      0819
     CA 2293395
                           С
                                 20011211
     EP 921824
                           A1
                                 19990616
                                              EP 1997-937321
                                                                      1997
                                                                      0819
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
             PT, IE, FI
     CN 1233281
                                 19991027
                                              CN 1997-198731
                                                                      1997
                                                                      0819
     CN 1233282
                                 19991027
                                              CN 1997-198732
                                                                      1997
                                                                      0819
     CN 1233283
                                 19991027
                                              CN 1997-198733
                                                                      1997
                                                                      0819
     CN 1233284
                                 19991027
                                              CN 1997-198758
                                                                      1997
                                                                      0819
     CN 1233947
                          A :
                                 19991103
                                              CN 1997-198887
                                                                      1997
                                                                      0819
     JP 2000516517
                          T2
                                 20001212
                                              JP 1998-510910
                                                                      1997
                                                                      0819
     ES 2187807
                          Т3
                                 20030616
                                              ES 1997-937323
                                                                      1997
                                                                      0819
     ES 2194212
                          Т3
                                 20031116
                                              ES 1997-937319
                                                                      1997
                                                                      0819
                                 20000808
     US 6100233
                                              US 1999-242652
                                                                      1999
                                                                      0318
PRIORITY APPLN. INFO.:
                                              US 1996-24117P
                                                                      1996
                                                                      0819
                                              WO 1997-US14614
                                                                      1997
                                                                      0819
```

OTHER SOURCE(S): MARPAT 128:221472 The present invention relates to a fragrance delivery system which comprises ≥ 1 β -ketoester pro-fragrances or pro-accords; the fragrance delivery system is used in stable, preferably clear, aqueous odor-absorbing compns. The malodor control compns. can be further characterized in that they may contain solubilized, uncomplexed cyclodextrin, and cyclodextrin-compatible antimicrobial actives, cyclodextrin-compatible surfactants, cyclodextrin-compatible humectants, or mixts. thereof. The aqueous odor-absorbing compns. are for use on inanimate surfaces, especially fabrics, and more specifically clothes, in order to restore and/or maintain freshness by reducing malodor without the need for washing or dry cleaning. Thus, 3,7-dimethyl-1,6-octadien-3-yl 3-(β -naphthyl)-3oxopropionate (I) was prepared from linalyl acetate and 2-naphthoyl

```
chloride. I was formulated with hydroxypropyl
     β-cyclodextrin, ZnCl3, Silwet L 7600, perfume, and propylene
     glycol to give a malodor control composition
IC
     ICM A61L009-01
     ICS D06M013-224; C07C069-738; C07C069-716
     62-5 (Essential Oils and Cosmetics)
CC
     Section cross-reference(s): 23, 40, 46
     beta ketoester odor control compn; fragrance delivery system beta
     keto ester; clothing malodor redn beta
     ketoester; fabric malodor redn beta ketoester;
     profragrance compn beta ketoester
     Carboxylic acids, biological studies
TΤ
     RL: BUU (Biological use, unclassified); IMF (Industrial
     manufacture); TEM (Technical or engineered material use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
         (oxo, esters; \beta-ketoester-containing malodor control compns.
        for restoring or maintaining freshness of
        fabrics and clothes without laundering or dry cleaning)
TТ
     Polysiloxanes, uses
     Polysiloxanes, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
         (polyoxyalkylene-, block, surfactant for
        malodor control compns.; β-ketoester-containing
        malodor control compns. for restoring or maintaining
        freshness of fabrics and clothes without
        laundering or dry cleaning)
IT
     Polyoxyalkylenes, uses
     Polyoxyalkylenes, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (polysiloxane-, block, surfactant for malodor control compns.; \beta-ketoester-containing
        malodor control compns. for restoring or maintaining
        freshness of fabrics and clothes without
        laundering or dry cleaning)
     Odor and Odorous substances
         (\beta-ketoester pro-fragrances; \beta-ketoester-containing
        malodor control compns. for restoring or maintaining
        freshness of fabrics and clothes without
        laundering or dry cleaning)
IT
     Deodorization
       Surfactants
     Textiles
         (β-ketoester-containing malodor control compns. for restoring
        or maintaining freshness of fabrics and
        clothes without laundering or dry cleaning)
IT
     Perfumes
         (\beta-ketoesters; \beta-ketoester-containing malodor control
        compns. for restoring or maintaining freshness of
        fabrics and clothes without laundering or dry cleaning)
TΤ
     27154-83-2D, derivs.
     RL: TEM (Technical or engineered material use); USES (Uses)
         (anionic surfactant for malodor control compns.;
        β-ketoester-containing malodor control compns. for restoring
        or maintaining freshness of fabrics and
        clothes without laundering or dry cleaning)
     74-88-4, Methyl iodide, reactions 78-70-6, Linalcol 80-26-2 100-07-2, p-Methoxybenzoyl chloride 100-44-7, Benzyl chloride, reactions 115-95-7, Linalyl acetate 122-04-3, p-Nitrobenzoyl
TT
                674-82-8, Diketene 764-85-2, Nonanoyl chloride
     chloride
     879-18-5, 1-Naphthoyl chloride
                                       2243-83-6, 2-Naphthoyl chloride
     2528-61-2, Heptanoyl chloride 3681-71-8 30385-25-2,
                                      53767-93-4, 2,6-Dimethyl-7-octen-2-
     Dihydromyrcenol
                       50816-18-7
     yl acetate 88969-41-9, Dihydromyrcenyl acetate
RL: RCT (Reactant); RACT (Reactant or reagent)
         (starting material; β-ketoester-containing malodor control
        compns. for restoring or maintaining freshness of
```

7.

```
fabrics and clothes without laundering or dry cleaning)
     106392-12-5, Ethylene oxide-propylene oxide block
     copolymer
     RL: TEM (Technical or engineered material use); USES (Uses)
        (surfactant for malodor control compns.;
        β-ketoester-containing malodor control compns. for restoring
        or maintaining freshness of fabrics and
        clothes without laundering or dry cleaning)
     25456-03-5P 203174-46-3P, 3,7-Dimethyl-1,6-octadien-3-yl
IT
     3-(\beta-naphthyl)3-oxopropionate 203174-48-5P,
     2,6-Dimethyl-7-octen-2-yl 3-(4-methoxyphenyl)3-oxopropionate
     203174-50-9P, 2,6-Dimethyl-7-octen-2-yl 3-(4-nitrophenyl)-3-
     oxopropionate 203174-52-1P, 2,6-Dimethyl-7-octen-2-yl
     3-(β-naphthyl)-3-oxopropionate 203174-54-3P 203174-56-5P
     203174-58-7P, 3,7-Dimethyl-1,6-octadien-3-yl 3-(α-naphthyl)-
     3-oxopropionate 203174-60-1P 203174-62-3P 203174-68-9P
     203174-71-4P 203174-73-6P 203174-74-7P 203174-77-0P 203174-78-1P 203260-01-9P 203516-69-2P 204076-05-1P
     RL: BUU (Biological use, unclassified); IMF (Industrial
     manufacture); TEM (Technical or engineered material use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (β-ketoester-containing malodor control compns. for restoring
        or maintaining freshness of fabrics and
        clothes without laundering or dry cleaning)
     7585-39-9D, \beta-Cyclodextrin, hydroxypropyl and Me ethers
ΙT
     10016-20-3D, \alpha-Cyclodextrin, hydroxypropyl ethers
     RL: TEM (Technical or engineered material use); USES (Uses)
        (β-ketoester-containing malodor control compns. for restoring
        or maintaining freshness of fabrics and
        clothes without laundering or dry cleaning)
                                THERE ARE 5 CITED REFERENCES AVAILABLE
REFERENCE COUNT:
                          5
                                FOR THIS RECORD. ALL CITATIONS AVAILABLE
                                IN THE RE FORMAT
L136 ANSWER 17 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1996:371913 HCAPLUS
DOCUMENT NUMBER:
                          125:36364
TITLE:
                         Aqueous metal cleaner with reduced
                          odor and its use
INVENTOR(S):
                         Dunn, Steven; Winston, Anthony E.
PATENT ASSIGNEE(S):
                         Church and Dwight Co., Inc., USA
SOURCE:
                          PCT Int. Appl., 44 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:
                          Patent
                          English
LANGUAGE:
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:
                       KIND DATE
     PATENT NO.
                                            APPLICATION NO.
                                                                      DATE
     -----
                                              -----
                                 -----
     WO 9609368
                         A1
                                 19960328
                                              WO 1995-US8488
                                                                       1995
                                                                       0705
         W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE,
         ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, UZ, VN

RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR,
             IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA,
             GN, ML, MR, NE, SN, TD, TG
     CA 2200750
                          AA
                                 19960328
                                              CA 1995-2200750
                                                                      1995
```

С

A1 19960409

20050913

CA 2200750

AU 9530034

AU 1995-30034

0705

```
1995
                                                                    0705
     EP 782611
                          A1
                                19970709
                                            EP 1995-926186
                                                                    1995
                                                                    0705
     EP 782611
                          В1
                                20030305
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
                                20030315
                                            AT 1995-926186
     AT 233805
                                                                    1995
                                                                    0705
PRIORITY APPLN. INFO.:
                                            US 1994-311254
                                                                 Α
                                                                    1994
                                                                    0923
                                            WO 1995-US8488
                                                                    1995
                                                                    0705
AB
     A metal cleaning composition useful in aqueous solution comprises an
     alkalinity-providing agent and a combination of surfactants
     comprising an ethoxylated thiol surfactant and a
     nitrogen-containing surfactant which reduces the odor of the
     thiol-containing surfactant. The low-foaming aqueous
     cleaning solns. of this invention are particularly useful in metal
     parts washers in which the cleaning solution can be filtered and
     reused in the parts washer. Thus, a composition of water 78.2, NaHCO3
     7.36, K2CO3 1.96, Na2CO3 1.60, Alcosperse 408 0.38, Monatrope 1250
     6.00, Alcodet 260 3.00, and LP-100 alkylpyrrolidone 1.50% was
     less malodorous than a composition without I.
     ICM C11D003-26
TC
     ICS C11D003-28; C11D003-30; C11D003-32; C11D003-34; C11D003-10
CC
     46-6 (Surface Active Agents and Detergents)
     amide deodorant ethoxylated thiol surfactant; cleaning
ST
     compn reusable low odor
TT
     Deodorants
     RL: TEM (Technical or engineered material use); USES (Uses)
        (in aqueous metal cleaners with reduced odor)
TT
    Detergents
        (cleaning compns., aqueous, with reduced odor)
IT
     Amines, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (coco alkyl, ethoxylated, in aqueous metal cleaners with
        reduced odor)
IT
     Thiols, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (ethoxylated, in aqueous metal cleaners with reduced
        odor)
IT
    Amides, uses
    RL: MOA (Modifier or additive use); USES (Uses)
        (fatty, N-(hydroxyethyl), ethoxylated, in aqueous metal
        cleaners with reduced odor)
TT
    Surfactants
    RL: TEM (Technical or engineered material use); USES (Uses)
        (nonionic, in aqueous metal cleaners with reduced odor)
    60-35-5, Acetamide, uses 79-10-7D, 2-Propenoic acid, polymers
IT
     144-55-8, Sodium bicarbonate, uses 497-19-8, Sodium carbonate,
          584-08-7, Potassium carbonate 14047-60-0, Monatrope 1250
    29132-58-9, Acrylic acid-maleic acid copolymer 133687-11-3,
    Polytergent CS 1 177933-72-1, Alcosperse 408 177933-74-3, BJ
    RL: MOA (Modifier or additive use); USES (Uses)
        (in aqueous metal cleaners with reduced odor)
IT
    2687-94-7, N-Octylpyrrolidone 13081-34-0, Polyethylene glycol
    mono(dodecylthio)ether 31799-71-0, Ethomid 0 17 34398-01-1,
```

Neodol 1-9

RL: TEM (Technical or engineered material use); USES (Uses) (in aqueous metal cleaners with reduced odor)

L136 ANSWER 18 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1996:318946 HCAPLUS

DOCUMENT NUMBER: 124:346594

TITLE: Freshness composition for reducing

malodor impression on articles

INVENTOR(S): Trinh, Toan; Cappel, Jerome Paul; Geis, Philip

Anthony; Hollingshead, Judith Ann; McCarty, Mark Lee; Swartley, Donald Marion; Wahl, Errol

Hoffman; Zwerdling, Susan Schmaedecke Procter and Gamble Company, USA PCT Int. Appl., 36 pp.

PATENT ASSIGNEE(S):

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PA'	rent :	NO.			KIN	_	DATE			APPI	LICAT	ION			DATE
	- 					-									
	9604				A1		1996	0222	,	wo :	1995-	US10	210		
															1995
	ш.	λM	זות	מם	P.C	סם	, BY,	CA	CNI	CZ	ът	шп	ar.	VE	0810
	W .														PL,
		RO,	RU,	SG,	SI,	SK	, TJ,	TT,	UA,	UZ,	, VN				
	RW:														GR,
							, PT, , TD,		Br,	BJ,	, CF,	CG,	CI,	CM,	GA,
US	5939		rill,				1999		1	us 1	L995-	3698	45		
															1995
7.11	9532	420			7.1		1006	.0202		7. TT 1	LOOF	2242	0		0106
AU	9032	423			AI		1330	0307	-	AU J	1995-	3242	9		1995
															0810
ΕP	7749	80			A1		1997	0528	1	EP 1	L995-	9288	14		
															1995 0810
	R:	AT,	BE,	CH,	DE,	DK,	, ES,	FR,	GB,	GR,	IE,	IT,	LI,	LU,	NL,
		PT,	SE										•	•	•
BR	9508	569			A		1997	1223	1	BR 1	1995-	8569			1995
															0810
JP	1050	3958			Т2		1998	0414		JP 1	1995-	5075	12		
															1995
זזם	2149	025			C1		2000	0520	1	DIT 1	997-	1040	50		0810
κυ	2143	025			CI		2000	0320			1991-	1040	50		1995
															0810
CZ	2893	96			В6		2002	0116	(CZ 1	997-	401			
															1995 0810
ΕP	1232	761			A1		2002	0821	1	EP 2	2002-	9422			0010
															1995
		3.00	20	CIT.	DE	DV	E.C	nn.	GD.	an.	TM				0810
	R:	PT,		CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	ידיד,	LU,	NL,	SE,
US	5663				Α		1997	0902	t	US 1	995-	5433!	50		
															1995
110	56704	475			7		1997	0022	т	וכ ז	996	6170	10		1016
US	30/04	1/3			A		エフフノ	U723	,	ו כי	. フフロー	o T / 34	± 7		1996
															0313

τ	JS 5783544	A	19980721	US	1997-834611		1997
τ	JS 6077318	A	20000620	US	1997-898215		0414 1997
τ	JS 6248135	B1	20010619	US	1999-416092		0722 1999
υ	S 2001044392	A1	20011122	US	2001-883418		1012
	S 6451065 S 2003005522	B2 A1	20020917 20030109	110	2002-222519		0618
		AI	20030109				2002 0816
PRIORI	TY APPLN. INFO.:			US	1994-289731	A	1994 0812
				us	1994-289970	A	1994 0812
				us	1994-289991	A	1994 0812
				US	1995-369845	A	1995 0106
				EP	1995-928814	А3	1995 0810
				WO	1995-US10210	W	1995 0810
				US	1995-543350	A3	1995 1016
				US	1996-617949	A1	1996 0313
				us	1997-898215	A1	1997 0722
				us	1999-416092	A1	1999 1012
				US	2001-883418	A1	2001 0618

AB A sprayable aqueous composition for restoring freshness to clothing and other surfaces without the need for dry cleaning/washing comprises .apprx.0.01-1% perfume, optionally, .apprx.0.1-5% water-soluble cyclodextrin, .apprx.0.1-10% water-soluble metallic salt, and .apprx.0-3% solubilizing aid. The composition is essentially free of any material that would soil or stain fabric

```
and contains .ltorsim.5% of low mol. weight monohydric alcs. The
     composition releases addnl. perfume fragrance upon rewetting, e.g.
     under conditions of perspiration. Perfumes with partitioning
     coefficient (Clog P values) <3, e.g. benzyl salicylate, benzyl acetate,
     etc. mixts., do not need alc. solvent and perfume with Clog P >3
     are solubilized with solubilizing aid.
     ICM A61L009-01
IC
     ICS A61L009-14
     46-4 (Surface Active Agents and Detergents)
CC
     ester perfume freshness compn clothing; freshness compn sprayable;
     malodor reducing sprayable compn; odor masking
     sprayable compn; absorbent odor aq sprayable compn
IT
     Surfactants
         (solubilizing aid; sprayable aqueous freshness composition of
        perfume containing)
     Odor and Odorous substances
TΤ
         (sprayable aqueous freshness composition of perfume for
         reducing/masking)
     Household furnishings
TT
     Textiles
         (sprayable aqueous freshness composition of perfume for
        reducing/masking odor on)
     7585-39-9D, \beta-Cyclodextrin, derivative
                                                  10016-20-3,
     \alpha-Cyclodextrin 17465-86-0, \gamma-Cyclodextrin
     RL: TEM (Technical or engineered material use); USES (Uses)
         (carrier; sprayable aqueous freshness composition of perfume
        containing)
     527-09-3, Copper gluconate 1344-67-8, Copper chloride
     4468-02-4, Zinc gluconate 7344-42-5, Zinc maleate 7646-85-7,
     Zinc chloride, uses 7733-02-0, Zinc sulfate 16039-53-5, Zinc lactate 16283-36-6, Zinc salicylate
     RL: TEM (Technical or engineered material use); USES (Uses)
         (odor control agent; sprayable aqueous freshness composition
        of perfume containing)
     60-12-8, Phenyl ethyl alcohol 77-53-2, Cedrol 78-70-6
Linalool 80-54-6 91-64-5, Coumarin 93-08-3, Methyl
TТ
                                                            78-70-6,
     \beta-naphthyl ketone 97-53-0, Eugenol 97-54-1, Isoeugenol
     98-55-5, α-Terpineol 99-86-5, α-Terpinene
     100-52-7, Benzaldehyde, uses 101-86-0, Hexyl cinnamic aldehyde 103-45-7 103-95-7 104-61-0 106-22-9 106-24-1, Geraniol
     103-45-7 103-95-7 104-61-0 106-22-9 106-24-1, Geranical 106-25-2, Nerol 107-75-5, Hydroxycitronellal 115-95-7, Linalyl acetate 118-58-1, Benzyl salicylate 119-61-9, Benzophenone,
             121-32-4, Ethyl vanillin 121-33-5, Vanillin 123-11-5,
     Anisic aldehyde, uses 134-20-3, Methyl anthranilate 138-87-4,
     β-Terpineol
                   140-11-4, Benzyl acetate 151-05-3,
     Dimethylbenzyl carbinyl acetate 470-82-6, Eucalyptol
     1222-05-5, Galaxolide 2050-08-0, Amyl salicylate 2630-39-9,
     Methyl dihydro jasmonate 3681-71-8, cis-3-Hexenyl acetate
     18479-57-7, Tetrahydromyrcenol 23495-12-7, Phenoxy ethyl
     propionate 53219-21-9, Dihydromyrcenol 130066-44-3, Lyral 156914-70-4, Koavone 171102-41-3
     RL: TEM (Technical or engineered material use); USES (Uses)
         (sprayable aqueous freshness composition of perfume containing)
L136 ANSWER 19 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                           1994:591448 HCAPLUS
DOCUMENT NUMBER:
                           121:191448
TITLE:
                           Processing of heat development photosensitive
                           materials
INVENTOR(S):
                           Hirai, Hiroyuki
PATENT ASSIGNEE(S):
                           Fuji Photo Film Co Ltd, Japan
SOURCE:
                           Jpn. Kokai Tokkyo Koho, 7 pp.
                           CODEN: JKXXAF
DOCUMENT TYPE:
                           Patent
LANGUAGE:
                           Japanese
FAMILY ACC. NUM. COUNT: 1
```

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06082990	A2	19940325	JP 1992-238284	
				1992
				0907
PRIORITY APPLN. INFO	D.:		JP 1992-238284	
				1992
				0907

AR The title materials, containing a photosensitive Ag halide, a reducing agent, and a binder on a support, are heat-treated in the presence of externally supplied water containing ≥1 selected from cationic and amphoteric surfactants, chlorohexidine salts, and polyhexamethylenebiquanidine salts to form images. When a small quantity of water is repeatedly used, the occurrence of a turbidity and bad smell is prevented, and high quality images without white voids are obtained. Thus, an imagewise exposed toner film was treated with an aqueous solution containing Lebon 15 (Na alkyldiaminoethyl glycine) and heat-developed with a copy paper to give a high quality image.

IC

ICM G03C005-58 ICS G03C008-36; G03C008-40

74-7 (Radiation Chemistry, Photochemistry, and Photographic and CC Other Reprographic Processes)

ST heat development photosensitive material processing; surfactant processing soln photothermog copying; chlorohexidine processing soln photothermog copying; polyhexamethylenebiguanidine processing soln photothermog copying

Photothermographic copying (processing method of, using water containing surfactants

and chlorohexazine salt or polyhexamethylenebiguanidine salt)

IT Surfactants

(processing solution containing, of photothermog. copying paper)

Quaternary ammonium compounds, uses TΤ

RL: USES (Uses)

(alkylbenzyldimethyl, chlorides, surfactant,

processing solution containing, of photothermog. copying paper)

TΨ 6843-97-6, Lebon 15

RL: USES (Uses)

(surfactant, processing solution containing, of photothermog. copying paper)

L136 ANSWER 20 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1994:167933 HCAPLUS

DOCUMENT NUMBER:

120:167933

TITLE:

purification of surfactants by

membrane filtration

INVENTOR(S):

Abe, Shigemitsu; Nagano, Yoshimi; Takeuchi,

Makoto

PATENT ASSIGNEE(S):

Ajinomoto KK, Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05317654	A2	19931203	JP 1991-132304	1991

PRIORITY APPLN. INFO.: JP 1991-132304

1991 0322

0322

- AB Aqueous solns. of micellized surfactants are purified and concentrated with ultrafiltration membranes having fractionation mol. weight 500-1000,000. Low-mol.weight compds. and malodorous substances are removed.
- IC ICM B01D061-14
- ICA B01F017-00
- CC 48-1 (Unit Operations and Processes)
- ST surfactant soln concn purifn membrane filtration
- IT Surfactants
 (micellized, aqueous solns, of, concen

(micellized, aqueous solns. of, concentration and purification of, by membrane filtration)

=>